Original Article

Nurses' Experiences at the Intensive Care Unit for COVID-19 in Indonesia: A Study of Hermeneutic Phenomenology

Fitri Mailani, Emil Huriani, Boby Febri Krisdianto, Elvi Oktarina

Medical-Surgical Department, Faculty of Nursing, Universitas Andalas, Padang, West Sumatera, Indonesia

Abstract

Background: Nurses working in Intensive Care Unit (ICU) for COVID-19 are more at risk as they interact more with infected patients. Therefore, this study aimed to explore the experience of Indonesian nurses who work in ICU for COVID-19 patients. **Materials and Methods:** A qualitative hermeneutic phenomenological approach was used. A total of 20 nurses working in the respective ICUs of eight COVID-19 referral tertiary hospitals in Indonesia were recruited using purposive sampling. Semistructured individual video call interviews were conducted in June–September 2021; then, Diekelmann's hermeneutic phenomenological approach was used to analyze and interpret the data. **Results:** Thirteen subthemes describing the following four themes, namely, the pleasing and bad feelings, new challenges of working, nursing professional growth, and nurse resource management for COVID-19**. Conclusions:** This study describes nurses' experiences working in ICUs during the COVID-19 crisis, such as their feelings, perceived challenges, and received support. Nurse leaders play a significant role in providing adequate Personal Protective Equipment (PPE), flexible work shifts, and a caring and healing work environment. However, being aware of the limit of pressure that an individual can manage and providing adequate allowance as rewards for work in risky areas are essential to avoid burnout.

Keywords: *Coronavirus disease 2019, intensive care units, nurses, qualitative research*

Introduction

The COVID-19 epidemic is increasing rapidly worldwide, with 223 countries being affected as of October 20, 2021.[1] The World Health Organization officially declared that the virus prevalence has reached a global pandemic phase. The cumulative number of confirmed cases reported globally is over 240 million, with the new cases and deaths being only above 2.7 million and 46,000, respectively, between October 11, and October 17, 2021.[2] Indonesia is the 14th country with the most coronavirus cases globally as of October 25, 2021, having 4,240,019 confirmed cases, and a total of 143,205 deaths which is still ranked the 2nd highest in Asia.[1] In July 2021, this country experienced a crisis where the addition of COVID-19 cases increased significantly in several big cities. Within a day, the addition of patient cases is up to 56,757 points, and the recorded death rate is up to 2,069 people.[1]

Healthcare personnel who are actively involved in diagnosing and treating COVID-19 patients may be exposed to mental health problems due to this challenging circumstance. Healthcare professionals may experience increased psychological distress due to the rising number of confirmed and suspected cases, the enormous workload, the scarcity of personal protective equipment (PPE), the extensive media coverage, the lack of suitable medications, and inadequate support.[3]

Mechanical ventilation is used on patients in critical care. Many of them will need specialized life support therapy, such as prone ventilation, continuous renal replacement therapy, and extracorporeal membrane oxygenation.[4] Critical nurses may cope with a heavy workload, chronic fatigue, the risk of infection, and worries about the patients' mortality. They probably also cope with patients' and their families' concern and sometimes even family misunderstandings. Owing to the important and immediate requirement for organ support, complications are much more common in critical care units than in routine care units.[5]

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Address for correspondence:
Fitri Mailani, Faculty of Nursing, Universitas Andalas, Limau Manis Campuss, Padang, 25163, West Sumatera, Indonesia.
E-mail: fitrimailani22@nrs.unand.ac.id

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In Indonesia, a COVID-19 referral hospital has opened a new subunit in Intensive Care Unit (ICU) to treat the respective patients and meet their needs. According to a report by the International Council of Nurses, during the first wave of the COVID-19 pandemic response, healthcare systems focused on increasing the capacity and potential of ICUs, which led to increased intensive care provider working hours and usage of various rotating-shift patterns.[6] Approximately 5% of infected patients require critical care and 30% require admission in an ICU.[7] ICU room presently has strict isolation. Moreover, nurses are at the forefront of caring for infected patients, so special skills are required while handling critical conditions.[8] The care of critically ill patients due to COVID-19 infection is very complex because many things need to be considered, starting from the information concerning the specific treatment and appropriate nursing interventions, which are still limited due to lack of experience.[9] In addition, specific attention is needed, such as expertise, knowledge, skills, attitudes, and the availability of infrastructure, both equipment and medical staff from hospitals.

Nurses caring for people with COVID-19 face in a context of moral dilemma and emotional turmoil.[10] The lack of medical facilities and staff creates confusion in patient care. This confusion is due to the unpredictable disease prognosis, social isolation, and high virus transmission rates, making it a significant challenge for all countries worldwide to provide quality care.[11] Numerous studies have demonstrated that perhaps these workers have a significant prevalence of psychological problems such as stress, sadness, and anxiety.[12] Performance problems are frequently linked to workplace risk factors such patient pain, suffering, and death, workplace conflict; hard work; sensitive working circumstances; and other factors relating to the physical environment like using tools and materials.[12] A cross-sectional investigation of medical staff in China from February 10, 2020, to February 20, 2020, during the COVID-19 outbreak revealed that 164 (32.03%) out of 512 staff members had direct patient contact and contracted the virus. Anxiety was present in roughly 12.5% of staff at the time.[13] Another research of clinicians, including physicians and nurses in Wuhan, China, during the commencement of COVID-19 revealed that healthcare providers reported significant levels of discomfort, insomnia, anxiety, and depressive symptoms.[3]

Recent research has emphasized the disease prevalence, clinical features, and management of patients COVID-19.[14] The severity of psychological problems affecting medical staff has been covered in other studies,[15] emphasizing the necessity of offering them psychological support.[16] Only a few studies have discussed the experiences of Indonesian critical care nurses caring for COVID-19–infected patients. The phenomenological approach investigates the significance and difficulties of individuals' experiences and offers crucial insights into human interactions. This research used a hermeneutic phenomenology approach, meaning the researcher could explore the participants' interpretations and add them. Hermeneutics provides a framework to comprehend these human experiences documented through language and context because communication and language are closely connected.[17] Based on this, one can gain specific knowledge by interpreting the experiences of those involved in a phenomenon. Considering the scarcity of information on the experiences and obstacles that ICU nurses confront while caring for COVID-19 patients, it is crucial to explore a better understanding of the existing challenges. Therefore, this qualitative phenomenological study aims to investigate and explain the experiences of ICU nurses during care provision to COVID-19 patients.

Materials and Methods

This research used a qualitative study conducted in the interpretive paradigm using a hermeneutic phenomenological approach. This approach enables a deep understanding of lived experiences by exploring a phenomenon from an individual's own perspective. It was conducted in tertiary hospitals in seven major cities in Indonesia from June to September 2021. A qualitative phenomenological approach was used to explore and explain nurses' experiences while providing care to patients with specific situations such as during the current pandemic. This approach seeks to enter into a person's experience as a whole, describes the experience structure, and captures the main themes and meanings of the experience for in-depth information to be obtained about the phenomenon.[17]

A total of 20 nurses working in ICUs of eight COVID-19 referral tertiary hospitals in seven major cities in Indonesia were recruited using purposive sampling; with the greatest diversity in terms of age, sex, work experience, and academic degree was used concerning the qualitative research. When conducting a purposeful sample, the researcher seeks for people who had a wealth of experience with the phenomenon being studied and who were able and willing to articulate it.[18] The inclusion criteria consisted of the following: ICU nurses with at least 1 year of critical care experience, had a minimum of 1 month experience of caring for COVID-19 patients in ICU, and agreed to participate in this study and share their experiences. The exclusion criteria were isolated nurses because they were infected with COVID-19.

Data were collected using semistructured video call interviews through zoom meeting. Participants were asked to describe their experiences concerning the central question of the survey: "Please, tell me how was your experience working as a special ICU nurse for COVID-19 patients?" The interviewer then proceeded to ask more probing questions such as "What do you mean?" "Please clarify," and "Could you be more explicit?" to probe deeper into their more profound experiences. Based on the consent

of the participants, all dialogues were recorded during the interviews that lasted 30–60 minutes each. This study had 20 interviews with 20 nurses in total, but after reviewing the eighteen interviews, no new information or ideas were discovered. To guarantee data saturation, however, two additional interviews were done. Owing to the thoroughness of the material collected from the participants, none of the interviews were repeated.

The data were analyzed and interpreted using Diekelmann's hermeneutic phenomenological method. By switching back and forth between the portions and the complete data, the researchers aimed to ensure that the meaning discovered was an interpretation of the participants' experience of the phenomena (hermeneutic cycle). One person performed each interview; however, two researchers from this study reviewed them. In this kind of phenomenology, all the research team's experiences are continuously reviewed, and the study's findings synthesize of the researchers' judgments. The data were analyzed using Dickelman's seven-step methodology. The second step of the analytic process started after all the interviews had been read through numerous times to have a general idea of the issue being researched. This stage involved extracting the overt and covert meanings from the participant's descriptions. The third stage involved the study team members analyzing the coded messages to come to comprehend the descriptions given. By referring to the interview transcripts and the participants, the discrepancies in the interpretations were clarified in the fourth step. The themes were identified and articulated in the fifth stage using the process of comparing and contrasting the texts. The results were broken down into topics and discussed at the sixth step. The seventh stage saw the presentation of the findings' ultimate design, which took the shape of key themes.[19,20]

According to Lincoln and Goba, the criteria of credibility, transferability or fittingness, and consistency or dependability were used to ensure data trustworthiness.[17] Researchers (two authors) spent a lot of time working with raw data to establish the data reliability. To acquire sufficiently familiar with the texts and become fully immersed in the data, researchers have frequently listened to the text of the interviews and transcribed them. In addition, credit was obtained through the member check. In other words, the participants received the text of the interviews along with the identified themes, and the participants confirmed that the themes successfully conveyed the significance of their experiences related to the care of a COVID-19 patient. Two professionals in the field of qualitative research kept an eye on the entire investigation to establish credibility. To verify the data and present it to others who are interested, the researcher also kept track of all actions and choices from the beginning. In addition, transferability was guaranteed by using maximum variation sampling.

Ethical considerations

Before the commencement of the study, approval with number 219/KEPK/2021 was obtained from the Research Ethics Committee in the Health Sector of Dr. M.Djamil hospital. In addition, Dr. M.Djamil Hopital discussed the targeted goals and procedures to be followed with the participants, received signed informed consent, and assured the privacy of their personal information.

Results

In this study, a total of 20 ICU nurses in the age range of 26–53 (mean 34.5) years were participated, including twelve females and eight males. The average work experience in ICU for COVID-19 was 9 months, and the demographic data can be seen in Table 1. The data's study identified four main themes, namely, feeling mixed emotions, challenges of working, nursing professional growth, and nurse resource management for COVID-19, while the thirteen subthemes are enlisted in Table 2.

Theme 1: The pleasing and bad feeling

One of the experiences shared by the nurses was about how they felt while treating COVID-19 patients in ICU, which included fear, sadness, boredom, tiredness, enthusiasm, and motivation. This theme consisted of two subthemes, namely, pleasing and bad feelings.

The pleasing feeling

Based on the data analysis, nurses expressed enthusiasm, motivation, and challenges during treatment, and they also felt delight when the patient recovered. A participant's statement was as follows: "*Now the fear is reduced, but there are still a few afraid of transmitting to the family at home, but there is a sense of being motivated, enthusiastic, and challenged to cure this COVID patient" (P8).*

The bad feeling

Nurses still expressed fear when the number of cases increased in Indonesia. They shared negative feelings such as anxiety, fear of being infected, disappointment with people who ignored health protocols, the sadness of seeing patients' death, tiredness, burnout, and boredom. Participants' statements were as follow:"*I feel sad, disappointed, specifically seeing people out there still don't believe that COVID exists" (P4)."I felt burnout; oh my God I am so tired to wear a hazmat suit like this…" (P16).*

Theme 2: New challenges of working

Nurses working in the ICU specifically for COVID-19 patients reported having many new challenges in treating patients. Based on the results of the data analysis, the challenges were identified as described in the subthemes, namely, exhausting protective cover, changing work pattern, excessive workload, working with new coworkers and teams, and unclear nature of the disease.

Table 1: Demographic characteristics of the study participants

Participants No	Gender	Ages (years)	Education level	Critical care experience (Years)	Work Experience in ICU COVID-19 (months)	Marital Status	Number of Children
P 1	Female	34	Bachelor's degree	10	6	Married	2
P 2	Female	35	Bachelor's degree	9	6	Married	1
P 3	Female	53	Bachelor's degree	12	13	Single	-
P 4	Female	33	Bachelor's degree	7	12	Married	-
P 5	Male	35	Bachelor's degree	11	12	Married	1
P 6	Male	30	Diploma's degree	2	12	Married	1
P 7	Female	34	Diploma's degree	3	18	Married	2
P 8	Female	37	Bachelor's degree	2	7	Married	3
P 9	Female	35	Diploma's degree	11	1	Married	2
P 10	Male	28	Diploma's degree	1	6	Single	-
P 11	Male	29	Bachelor's degree	2	2	Married	1
P 12	Female	35	Diploma's degree	2	2	Married	1
P 13	Male	32	Diploma's degree	5	10	Married	1
P 14	Female	26	Bachelor's degree	2	1	Single	-
P15	Male	36	Bachelor's degree	11	16	Married	4
P 16	Female	35	Master's degree	7	10	Married	1
P 17	Male	36	Master's degree	7	8	Married	2
P 18	Male	37	Master's degree	4	18	Married	2
P 19	Female	30	Bachelor's degree	2	18	Single	-
P 20	Female	39	Bachelor's degree	6	3	Married	3

Exhausting protective cover

Using level 3 PPE in the COVID-19 ICU requires an extraordinary struggle. It was reported that a long time was needed to adapt in using level 3 PPE because this would limit the movement of nurses at work. A participant's statement was as follows: "*Initially nervous, short of breath, hot, but now they are used to level 3 PPE, although some actions become less focused and limited while using this PPE" (P10).*

Changing work pattern

For efficiency in ICU, nurse management made a policy to change the pattern of working hours and divide working hours into shifts and nurse's work area into red and green zones. Nurses were divided into two teams, and each took turns as 4 hours in the red zone and 4 hours in the green zone. A participant's statement was as follows:*" The work pattern has been changed. We divide into two teams in one shift, so 4 hours in the red zone and 4 hours in the green area later alternately. The difficulty is when there are many patients; for example, there are 30 patients, while only six people enter, so it's a challenge" (P8).*

Workload excessive

The nurse said the workload also increased along with the increasing number of COVID-19 cases in Indonesia. Almost all hospitals have full COVID-19 ICU facilities every day, yet the queue list is continuously there. At the same time, some of the health workers in ICU were also infected with COVID-19. This was exacerbated by the number of nurses who volunteered and worked from ICU without the basic knowledge of intensive care; hence, they need to be guided more by the team leader. In this regard, one of the participants said: "*It is clear that the workload has increased because there are also many waiting list patients in ICU, there are patients who have just died, and some want to come back. The situation was very crowded. We can only pray and be given health to help patients, really full beds every day" (P15).*

Working with new coworkers and teams

The nurses reported that challenges also came from new coworkers and teams. Furthermore, the groups working in COVID-19 ICU were from various rooms in the hospital, and the majority had no prior experience of working in the intensive care room. Even when cases increased significantly, hospital management accepted volunteer nurses working in ICU, who were primarily fresh graduates. In this regard, one of the participants stated:"*We work with new colleagues and team, and sometimes, it isn't easy to adapt because in one team the backgrounds are different. Initially, COVID-19 ICU room was opened from eleven nurses, only 5 who had basic intensive care. So in every shift, we are paired with colleagues who do not have basic intensive care, it feels like the burden is increasing" (P11).*

Unclear nature of the disease

The nurses said that the prognosis of the disease was unclear and looked different for each patient. This was due to the new variant of COVID-19, the unknown nature of the disease because of lack of knowledge about the prognosis, and lack of specific drugs, while the unclear

clinical presentation was one of the causes of obscurity and uncertain situations. In this regard, one of the nurses said:"*Yes, that's because the COVID-19 pandemic is something new, and everyone is still groping: the exact medicine doesn't exist yet, we experience a choice of therapy from a doctor like that, sometimes some treatments are successful, but done on other patients it doesn't work" (P15).*

Theme 3: Nursing professional growth

Nurses stated that new experiences gained while caring for COVID-19 patients in ICU increased professionalism in their work, such as knowing the treatment and nursing care for COVID-19 patients, creating a new image of nursing, and strengthening the nurse's professional identity.

Table 2: Themes, subthemes, and codes obtained from data analysis

Theme	Sub-theme	Coding
The pleasing and bad feeling	The pleasing feeling	Excited/enthusiastic
		Proud to be frontline
		Motivated
		Happy to caring
	The bad feeling	Disappointed
		Sorrow
		Saturated
		Tired
		Burnout
		Anxiety
		Fear
New Challenges of Working	Exhausting protective cover	Skin damage
		Difficulty for elimination
		Difficulty for breathing
		Physical hotness
		The reduced focus when working
	Change work pattern	Work with protective cover
		Division of working hours in shifts
		Optimizing communication using telephone/video calls
		Change of daily routine
	Workload excessive	The nurse-patient ratio imbalance
		Full bed every day
		an increasing number of ICU nurses confirmed positive for COVID-19
		The increased mortality rate in ICU
		Nurses do not get vacation or time off
		Double job as nursing and guiding new coworkers
	Working with new coworkers and teams	New coworkers did not have experience in Intensive care
		New coworkers are a fresh graduate
		Coping with new teams
	Unclear nature of the disease	New variant COVID-19
		Prognosis unpredictable
		Lack of specific medication
		Unknown clinical presentation
Nursing professional growth	*Acquired new knowledge*	Prone position
		High Flow Nasal Cannula (HFNC)
		Extra Corporeal Membrane Oxygenation (ECMO)
		Continue Renal Replacement Therapy (CRRT)
		Knowing medicine for the virus
	A new image of nursing	Nurses source of information about COVID-19
		Nurses as heroes

Contd...

Table 2: Contd...

Theme	Sub-theme	Coding
	Strengthening the nurse's professional identity	Trusted to initiate sharing session to all health workers
		Engage in a cross-professional study
		Growth in a relationship with the doctors
		Patients and family sending love and gratitude
Nurse resource management for COVID-19	Nurses requirements	Not pregnant
		Not breastfeeding
		No comorbidities
		Prioritizing nurses under 40 years old
	The privilege of being a COVID-19 ICU nurse	got enough allowance
		got food, snacks, and vitamins while on duty
		several cities provide hotels/guesthouses for nurses
		got "time off" five days a month
	The good support system	Caring from management/the leader
		adequate facilities and infrastructure
		support from family

Acquired new knowledge

The participants said one of the most preferred experiences in treating COVID-19 patients was gaining experience and new skills in providing the respective nursing care and getting to know the actions and treatments for the infected persons, such as prone position, High Flow Nasal Cannula (HFNC), Extracorporeal Membrane Oxygenation (ECMO), and Continued Renal Replacement Therapy (CRRT). One of the participants said: *"Here we also get a lot of new knowledge, such as prone position, High Flow Nasal Cannula (HFNC), which we have never done before, and several other actions such as CRRT (Continue renal replacement therapy), which is performed on patients on ventilators. We also have ECMO equipment. We have done ECMO (Extracorporeal Membrane Oxygenation) 4 times" (P4).*

A new image of nursing

At the beginning of the pandemic, the community had a negative stigma. It stayed away from nurses who worked to treat COVID-19 patients, but presently, people were starting to understand and need the correct information from health workers. Currently, nurses are sources of information that are trusted by the community, and they are considered heroes. In this regard, one of the nurses stated: "*My neighbors often ask me when they have a fever and cough and suspect COVID-19. They ask me what medicines, what vitamins are good. Many people bring consultation concerning COVID-19 to me, some of them call me a hero" (P14).*

Strengthening the nurse's professional identity

Nurses reported significant experiences while combating COVID-19, such as being trusted to initiate sharing sessions with all health workers, engaging in a cross-professional study, growth in relationship with the doctors, and expressing gratitude as well as significant acknowledgment from patients and their families. One of the nurses said: "*I have gained many valuable experiences, such as sharing with nurses and doctors in hospitals as a speaker at online seminars on the care of COVID-19 patients in the ICU. Even nurses are often trusted to share their experiences treating COVID-19 patients at scientific meetings in front of other health workers; we are also involved in research with other health workers" (P9).*

Theme 4: Nurse resource management for COVID-19

The participants also reported experiences about the selection of nurses to care for COVID-19 patients, the privilege of being a COVID-19 ICU nurse, and the excellent support system.

Nurses requirements

The requirements to become a COVID-19 ICU nurse included not being pregnant, not breastfeeding, and with no comorbidities, while the prioritized persons were less than 40 years old. In this regard, one of the participants said: "*Yes. the first conditions are not pregnant, not breastfeeding, no comorbidity, and the elderly are also asked for their willingness, so nurses are prioritized for young and middle-aged adults, 40 years and under (range 28-38). However, some are aged 40 and above" (P16).*

Privilege of being a COVID-19 ICU nurse

The Indonesian government represented by the health ministry provided incentives to nurses working to treat COVID-19 patients. Nurses also obtained other benefits such as receiving snacks and vitamins while on duty, provision of hotels/guesthouses by several cities, and getting "time off" 5 days a month. One of the participants

said: "*What I like the most about treating COVID patients is the allowance (laugh)….that's pretty good" (P2).*

Excellent support system

Currently, nurses reported receiving support and care from the management and leadership. Therefore, every of their conveyed needs were immediately facilitated by the administration.

In this regard, one of the nurses stated: *"The leadership is very supportive and caring, yes, that's according to what I discussed earlier that what makes us comfortable, makes us strong. It's not just the people who are beside us, but also the people at the top, the people below support each other, they humble to talk to us, there is no emphasis on that you have to be like this or not, but if you can do it like that" (P13).*

Discussion

Four themes were extracted as experienced by ICU nurses, including "Feeling Mixed Emotions," "Challenges of Working," "Nursing professional growth," and "Nurse resource management for COVID-19." The emergence of this pandemic in many countries exposes nurses to new experiences and challenges such as inadequate resources and PPE, increasing number of patients, and lack of preparedness (overcoming pandemics). These conditions cause nurses physical and mental strain and complex ethical problems.[21,22]

Based on this study, nurses expressed various feelings while working in ICU for COVID-19. Becoming frontline workers, they had mixed emotions such as being frightened, living in uncertainty, and feeling inadequate.[23] Some of the participants' expressions indicate pleasing sense, such as feeling excited, proud as the frontline, challenged, and delighted when the patient recovers, as well as having increased motivation and being satisfied with individual performance. However, they also expressed the bad feeling, namely, being disappointed with the conditions in the community that neglected to comply with health protocols, sadness of seeing the death rate increase, tiredness, burnout, and bored being routinely on duty. Furthermore, the previous study showed nurses suffering from mental health issues at levels moderate and high,[24] in line with another study that reported nurses caring for COVID-19 patients in ICU have high psychological pressure.[25] Those results are in line with Hu et al. (2020),[26] who reported that moderate amount of burnout and a high level of worry in the average nurse emotional tiredness (60.5%), depersonalization (42.3%), and personal achievement (60.6%) were mentioned by about half of nurses, whereas 91.2% of nurses reported anxiety, despair, and moderate to high fear levels.[24,26] They are under much stress, which endangers their life with developing psychological problems such as fear, worry, restlessness, depression, confusion, anxiety, nervous moods, and aggression.[26,27]

In the fight against COVID-19, nurses are working valiantly to give care and save lives. Many participants work long shifts for weeks at a time without taking a day off; hence, they are at risk of contracting COVID-19, which leads to death.[28] With the rapid increase in patients, which causes severe nurse shortages, it is essential to establish a scientific and reasonable nursing shift schedule.[29] Almost all ICUs for COVID-19 in this study divided shifts into 4 hours green zone and 4 hours red zone. ICU nurses also have to deal with the insecurity of their jobs. The disease's uncertain nature, the unpredictability of its prognosis, and the lack of a clear treatment induce stress. Nurses experience physical fatigue due to changes in work patterns, and since the number of patients increased during COVID-19 outbreak, their working hours climbed by 1.5–2 times of the previous duration.[30] Workload grows in tandem with the increase in working hours, and the use of PPE that nurses wear for safety appears to have contributed to this overwhelming fatigue.[31]

When there was an increase in COVID-19 cases and the need for an ICU, hospital leadership was tasked with creating a new care team and integrating the deployed nurses into their staff. Negotiating this new relationship takes time and is often challenging, while the varied backgrounds of nurses in the COVID-19 ICU also hampered work efficiency. Experienced critical care nurses are to supervise new persons in ICUs since most tend to be anxious about the extra responsibility and implementation of unfamiliar practices such as managing highly infectious ventilated patients in the prone positions. Nurse practitioners and nurses in other advanced care roles are likely to play a central role in training and mentoring.[32] This challenge was intensified for nurses paired with different persons each day and when the doctor assigned to the team was unclear. The challenges of working with new coworkers and teams, such as building relationships on new care teams had to be negotiated, nurses struggled with a lack of defined roles, and challenges arose from being paired with different partners each day.[33]

According to other studies, this pandemic also provides opportunities for professional nursing growth, such as love, compassion, honor and respect for the profession, admiration and thanks from surrounding individuals, and active cooperation during patient care according to other studies.[34] Consequently, nursing leaders and staff need to respect this position and redouble their efforts to maintain and improve it. Nurses need full support from the authorities to continue providing healthcare services during the pandemic. With financial and spiritual support from the sources, part of the efforts of this crucial stratum of health workers can be compensated. On the other hand, approval from authority creates motivation, love, and interest to serve under a critical situation. In this study, nurses stated that they had many experiences with interventions for

airway clearance problems and impaired patient breathing patterns.

At the time, there was a wave in COVID-19 cases in Indonesia and the need for ICUs in hospitals increased; it was indicated that despite organizational efforts made to recruit more nurses to units during the pandemic, the nurses sometimes had no prior experience and failed to cope with the provided workload. In this situation, various studies confirm the workload increase[35,36] specifically, demonstrated explicitly by higher scores in the Nursing Activities Score, thereby strengthening the ideal nurse–patient ratio of 1:1.5.[37-39] Despite these negative experiences, nurses highlight the excellent support related to work among all the health professionals in the unit and the nursing leader. In this study, nurses stated they received excellent support from the nursing management, and the government has also provided sufficient allowances. This is one of the positive experiences felt by nurses.

We had some limitations in this study. The timing of the data collection could have impacted the results of our research because the COVID-19 pandemic spread differently throughout the nation. However, our results show that nurses' experience throughout the country is similar despite differences in the number of patients treated for COVID-19. As this is a national sample, our results should be viewed from an Indonesian perspective; hence, differences in ICU organizations, nurses' competencies, and nurse–patient ratios between countries should be considered. Nevertheless, the findings of this study share many similarities with other studies, not least regarding feeling mixed emotions, challenges of working in ICU for COVID 19, and we believe that our results are transferable.

Conclusion

In general, this study illustrates a clear and comprehensive understanding of the experiences of COVID-19 ICU nurses during the current endemic. Furthermore, ICU nurses have various feelings and challenges. Despite this situation, nurses fulfilled their professional obligations. Nurses also have the opportunity to grow professionally and improve their skills and abilities to collaborate with other professionals. This indicates that leadership is needed at the nursing organization level to evaluate and refine crisis staffing models. Moreover, models ought to be developed to balance patient and nursing needs while maximizing the skill and expertise of critical care nurses. Nurse leaders play significant roles in providing adequate PPE, flexible work shifts, and a caring and healing work environment. However, being aware of the limit of pressure that an individual can manage and provide of adequate allowance as rewards for work in risky areas are essential to avoid burnout.

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Conflicts of interest

Nothing to declare.

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