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Lessons learned and recommendations from the COVID-19 pandemic: Content analysis of semi-structured interviews with intensive care unit nurse managers in the United Arab Emirates

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Abstract

Aim: This study aims to explore how nursing services were managed and provided in intensive care units during the COVID-19 pandemic and clarify the management lessons learned.

Background: The surge in the number of patients with COVID-19 worldwide and the unpredictability of new variants mean the voices of nurse managers who participated in fighting the pandemic in intensive care units must be considered. Health care systems need specific plans to face similar future crises.

Method: This is a descriptive, qualitative, narrative study using indirect content analysis.

Results: We analysed 37 intensive care unit nurse managers' reflections on lessons learned from the COVID-19 pandemic. Four themes were extracted: restructuring organisations' resources, issues with family-centred care, education and training and policy reforms.

Conclusions: Promising strategies for Emirati intensive care units in planning for responses to future crises include maximizing organisation resources, boosting family-centred care, providing in-service training for nurses and policy reform.

Implications for Nursing Management: Our findings will support health care leaders, educators, policymakers and researchers to improve the management of similar pandemic situations. This study presents fundamental data concerning the subjective experiences of intensive care unit nurse managers. These experiences may inform development of multi-dimensional strategies including: ensuring the adequacy of projected supplies, space and nursing workforce; establishing communication protocols; and reforming existing policies.

KEYWORDS
content analysis, COVID-19, intensive care unit, lessons, nursing, recommendation

1 | INTRODUCTION

The increasing numbers of patients with COVID-19 both globally and in the United Arab Emirates (UAE) (World Health Organization [WHO], 2020) mean it is necessary for health care systems to consider health care service quality, affordability and accessibility and empower health care providers, including nurses. To contain the pandemic and decrease its impact on the community, the UAE government issued an adaptable budget and implemented measures to offset the potential harm through preparatory steps to check the spread of the virus (The UAE Government, 2020). UAE leadership has continuously forecast that 'After this pandemic, the world needs new health, economy, and political cooperation systems. We must keep pace with events that can paralyze the world in weeks'. Health care systems need specific plans to face similar crises that may emerge in the future (Milesky, 2020). If appropriate measures are not implemented, health care providers may feel disused, distressed and unsafe.

Health care systems were disrupted by the sudden and rapidly moving outbreak of COVID-19 (Tort-Nasarre et al., 2021). For example, health care settings faced major shortages of personal protective equipment (PPE), the mobilization and management of human resources in health care settings was unplanned and disorganized, health care facilities were not scalable to respond to the sudden influx in the need for services, there was a lack of guiding policies and staff preparedness and decision-making processes were chaotic. Health care service managers encountered unprecedented challenges and were under pressure to run their services as efficiently as possible despite these challenges (Moradi et al., 2021; Vázquez-Calatayud et al., 2022). It is therefore timely for nurse managers, especially in intensive care units (ICUs), to consider lessons learned from this outbreak to optimize responses to similar situations in the future.

2 | BACKGROUND

With the sudden arrival of COVID-19, health care systems faced many uncertainties such as lack of PPE, long hours using PPE and high infection/mortality rates among frontline nurses (Tort-Nasarre et al., 2021). Other challenges were shortages of human resources to work in ICUs, shortages of beds and limited space in hospitals. Because of the shortage of nurses in the UAE, nurses were asked to transfer from non-critical to critical units. ICU nurses were asked to manage this shortage and educate delegated nurses and therefore had to increase their working hours. Robust health care systems and hospital policies aimed to support frontline health care workers, including nurses, especially those working in ICUs (Kringos et al., 2020). However, most hospitals were not prepared for the crisis or the surge in patients, and some are still struggling 2 years after the beginning of the pandemic. In addition, few studies have identified lessons learned during COVID-19, especially in the ICU setting (Moradi et al., 2021). Building in-depth understanding of lessons learned will help in creating a reasonable environment for nurses and

support better quality of care for patients (Kieft et al., 2014) should a similar situation emerge in the future. Nurse managers should therefore start to consider the path forward (Catania et al., 2021). Nurses' experiences during the COVID-19 pandemic can provide lessons that should be incorporated as routine practice in health service management and planning.

Alongside the routine care for ICU patients and the management of these settings, other perspectives of the path forward should be considered, such as ensuring reasonable workloads and sufficient resources (Catania et al., 2021; Milesky, 2020), maximizing staff support (Rieckert et al., 2021), compensating for the shortage of ICU nurses with appropriate competencies (Poortaghi et al., 2021), providing a safe environment (WHO, 2020) and the increased daily physical, psychological and moral demands on nurses (Hossain & Clatty, 2021).

The UAE health care system has unique features and characteristics. For example, there are multiple health care authorities that manage the health care services, including the Ministry of Health and Prevention, Department of Health—Abu Dhabi, the Dubai Health Authority and Presidential Affairs that runs its own health care facilities. In addition, the UAE health workforce characteristics are unique, as the majority of health care providers are expatriate and come from different educational and clinical backgrounds; they are also mobile and transient in nature (Al-Yateem et al., 2021). ICUs in the UAE also have specific characteristics such as staffing, policies, management styles, infection and mortality rates and health care specifications. Therefore, this study aimed to explore the lessons learned in managing health care services in the UAE, especially nursing services, during this pandemic through a careful analysis of nurse managers' descriptions of their experiences. The findings will inform measures to manage future unexpected similar situations in ICUs.

3 | METHODS

3.1 | Aim and objectives

The objectives of this study were to describe the lived experiences of ICU nurse managers of how nursing services were managed and provided in ICUs during the pandemic. Specifically, we sought to identify management lessons learned in dealing with this unexpected pandemic situation in ICUs and how these experiences can be used to inform responses in future similar situations.

3.2 | Study design

This study used a descriptive qualitative phenomenological design (Colaizzi, 1978). This design allowed us to obtain a deep understanding of the experiences of ICU nurse managers who were fully engaged in the response to COVID-19. We also explored how the nursing services were managed and provided in ICUs and clarified the lessons learned. A qualitative approach is recommended to gather holistic details of an event (Sandelowski, 2010).

3.3 | Study settings

This study was conducted in adult ICUs in 13 conveniently selected governmental and non-governmental hospitals in the UAE. The sample included hospitals from five different Emirates: Sharjah, Dubai, Ras Al-Khaimah, Abu Dhabi and Ajman. This allowed the findings to reflect a breadth of experience. Participating facilities were teaching hospitals managed by the UAE Ministry of Higher Education and Scientific Research. The ICUs involved in the present study were devoted to providing care services for patients with COVID-19.

3.4 | Study participants

This study involved ICU nurse managers from the participating ICUs who were involved in managing and caring for critically ill patients with COVID-19. Eligible ICU nurse managers were those who had at least 2 years of work experience in general ICU management and willingly agreed to participate in this study. As nurse managers were part of the frontline team fighting the COVID-19 pandemic, we selected nurse managers with different backgrounds from across the UAE using a purposive approach (Patton, 2001). This strategy allowed the inclusion of a sample that was diverse in terms of age, gender and prior work experience.

Recruitment of participants was managed via emails that were sent to the selected ICU nurse managers. All responses were collected by a research assistant. Data saturation was reached with 37 nurse managers based on examination of the collected data, which revealed similar findings and answers. Therefore, it was evident that the addition of new participants would not provide new information.

3.5 | Data collection

In-depth interviews were used to collect participants' experiences. Data were collected from March to November 2021. Participants completed semi-structured individual interviews that were conducted by trained data collectors. The interviews lasted around 30 min and were held using an online platform. Table 1 presents the sequence of interview questions. Interviewers were chosen based on their experience in interviewing. All interviewers received training (1/2 day) on how to interpret and deliver the interview guide to elicit consistent information across all interviews. We used individual interviews to provide privacy and ensure confidentiality for participants, thereby allowing them to talk freely about their experiences, challenges and lessons learned during the pandemic.

The interviews focused on ICU nurse managers' experiences and views of the lessons learned when facing the COVID-19 pandemic, along with risks, challenges and their coping strategies. In addition, we sought their recommendations for responding to such crises in the future. All interviews were videorecorded, and important points and nonverbal cues (i.e., laughter, silence, tone of voice, eye contact and sighs) were immediately transcribed and documented with interview

TABLE 1 Semi-structured interview guide

- Tell us about your experiences while caring for COVID-19 patients in the ICU?
- What were your feelings about patients in cases of recovery and/or death?
- How did your life change when accepting the anti-pandemic task?
- What were your coping strategies while caring for COVID-19 patients in the ICU?
- What would you recommend for infection prevention and control in such situations?
- Share with us the lessons learned in dealing with this unexpected pandemic situation in the ICU?
- In your opinion, how was the nursing service managed and provided in ICUs during the pandemic?
- From your point of view, what management strategies were successful during the pandemic stage?
- From your experience, what management strategies were not successful during the pandemic?
- Based on your overall work experience, if similar situation happened, how should it be managed?

Note: All questions were developed in the English language by the authors and answered by intensive care unit (ICU) nurse managers who were familiar with the English language.

field notes and further synthesized on a rapid assessment procedure (RAP) sheet. Researchers often use RAP sheets in rapid qualitative research to summarize emerging findings and share them with the research team throughout the study (Beebe, 2014).

3.6 | Data analysis

As this was a descriptive phenomenological study, data were analysed using Colaizzi (1978) method. This method is rigorous and robust and ensures the credibility and reliability of the results obtained. It allows researchers to identify emergent themes and their relationships. Furthermore, this method is clear and logical and can reveal the structure of the experience under study (Colaizzi, 1978). ICU nurse managers' experiences and lessons learned when dealing with the crisis were used as the units of analysis. Data analysis commenced by relating each statement to its significance in participants' experiences. ICU nurse managers' narratives were read several times to gain a sense of the phenomenon under analysis. Equal value was assigned to each statement by using horizontalization, which represents a segment of meaning. Multiple statements with similar terms were grouped to form theme clusters. Clustered themes were then synthesized into a rich, textured description. A description of the structure of the experience was constructed through imaginative variation and reflection on the textural description. A textural-structural description was then generated for each participant by repeating this method of analysis. Authenticity was ensured by the research team consistently rereading and reflecting on the interview transcripts and resulting themes. The categorization matrix was modified after

several debates among the research team, redundant descriptions were removed and all authors accepted the structure of the findings. Following exhaustive description, a final draft was emailed to the participating ICU nurse managers who were invited to comment on the validity of the draft.

3.7 | Rigour

To ensure the trustworthiness of the study findings, four methodological aspects were considered in this study: credibility, transferability, dependability and confirmability (Bengtsson, 2016; Elo et al., 2014; Forero et al., 2018). Credibility was ensured by involving participants of all genders, with different experiences and varied qualifications from different hospitals across the UAE. In addition, participants were invited to check their interview transcripts to ensure that their intended meaning had been captured. In terms of transferability, the research was fully explained in the study report and all study stages, including study context, sampling method and data collection, were recorded to enable scrutiny by readers. Dependability and confirmability were ensured by preparing detailed drafts of the study process so that all authors could track the data and sources and understand each other's data interpretations.

3.8 | Research team

The research team included five members, all of whom were academics and familiar with qualitative research methodology. All research team members had significant experience in research in the nursing field, including nursing management, and provided valuable contributions to the data processing and interpretation.

3.9 | Ethical considerations

This study was approved by the University of Sharjah Research Ethics Committee (REC-21-01-16-01). Consent to participate was obtained from each participant before their interview, after they had received an explanation of the details of the study. All interviews were anonymized, and a code number was assigned to each participant. The first author encoded the identities of the participants as 'INM' with the number assigned to interviewed ICU nurse mangers. No one of the team had access to the ICU nurse mangers' information. All recorded interviews were downloaded onto a private password-protected computer at the main researcher's office. The content of all interviews (e.g., videos and transcriptions) were only accessible to the researchers.

4 | FINDINGS

In total, 37 ICU nurse managers (nine males, 28 females) aged 38–45 years participated in this study. All participants had more than 5 years of experience in nursing management and had worked throughout three waves of the COVID-19 pandemic in the UAE. Four themes were identified from the data: restructuring organisations' resources, family-centred care, education and training and policy reform (Table 2). Table 3 illustrates challenges, lessons and recommendations reported by ICU nurse managers.

TABLE 2 Themes, subthemes and codes from the content analysis

Theme	Subtheme	Codes
1. Restructuring organisations' resources	1.1. Staff issues	Workload (increase patient-to-nurse ratio)
		No leave except sick leave
		Poor staff physical and psychological well-being
		Too long hours with PPE
		Threatened work environment
		(Staff afraid of infection and cross infection to their families)
	1.2. Equipment availability/accessibility	Availability of PPE and its proper use
		Availability of beds, mechanical ventilators etc.
	1.3. Space availability	Bed availability
2. Issues with family-centred care	2.1. Communication	Lack of family meetings
	2.2. Involvement in decisions	No regular family involvement in the decision-making process
3. Education and training		Need for continuous education on appropriate use of PPE and new therapies
4. Policy reforms	4.1. Scheduling	Change in duty hours
		Change in sick leave policy
	4.2. Visitation policy	No visitation allowed
	4.3. ICU admission policy	Selective criteria for ICU admission

TABLE 3 Challenges and lessons/recommendations reported by intensive care unit nurse managers in semi-structured interviews

Theme and subthemes	Challenges	Lessons/recommendations
1. Restructuring organisations' resources 1.1. Staff issues 1.2. Equipment availability/ accessibility 1.3. Space availability	Staff shortage	Recruit new staff
		Redeploy acting staff
		Reallocation critical care-trained staff from other departments
		Hiring critical care-trained staff from outside the country
	Working in full PPE	Minimize hours in PPE
		When possible, perform tasks away from COVID-19 patients
		Decrease staff exposure hours to patients with COVID-19
	Staff physical and psychological exhaustion	Increase break time per shift
		Reschedule shifts to be 6 h only
		Positive reinforcement
		Resilience programmes
		Insurance coverage including family
	Limited equipment availability (i.e., PPE, mechanical ventilators)	Recruit/assign a PPE czar
		Proactive projection of devices and supplies based on ICU needs
		Adjust entries of supplies into hospital inventories
	Inadequate space	Reallocation of hospital departments
		ICU expansion
		Interfacility collaboration
		Field hospitals
2. Issues with family-centred care 2.1. Communication 2.2. Involvement in decisions	Limited or no communication	Taking advantage of available technology
	Involvement in decisions	Encourage patients' virtual presence in daily rounds
3. Education and training	Unclear definition of disease	Continuous training on different aspects of patient care
	Use new therapies	
4. Policies reform 4.1. Scheduling 4.2. Visitation policy 4.3. ICU admission policy	Exhausting working hours Poor schedule design	Changing schedule design
	No family interactions/communications	Use virtual visitation strategies
	Limited beds for non-COVID-19 patients	Relying on telehealth as much as possible

4.1 | Restructuring organisations' resources

This was the dominant theme that emerged from participants' narratives. This theme covered three subthemes: staff issues, equipment availability and space availability.

4.1.1 | Staff issues

Most participating ICU nurse managers reported staff shortages as the main challenge they faced during the pandemic, with many noting that provision of human resources was of concern: 'Too many positive cases per day, in addition [our colleagues] got sick leave' (INM 8). For future similar pandemics, participants recommended redeploying acting staff and reallocating critical care-trained staff from other departments: '… [We] asked nurses who have critical care experience in other departments to join [the] ICU team' (INM 24). Despite most participants recommending recruiting new staff, they were upset because 'there was a very high rate of staff resignation at the time of

[the] pandemic' (INM 4). Some managers suggested re-hiring critical care-trained expatriate staff to fight the pandemic; for example, 'We might ask expatriate nurses who were abroad to come back and join us in … [our] fight against COVID-19' (INM 14).

ICU nurse managers faced other staff challenges during the pandemic. Many participants stated that nurses were annoyed and irritable about having to work in full PPE for long shifts when providing care for patients with COVID-19 in the ICU. They noted that 'they (ICU nurses) were always complaining of wearing PPE for long hours in [the] ICU … They could not eat, or drink … Even toileting was considered a drama for them' (INM 23). It was also reported that 'ICU nurses complained of being frustrated that they could not communicate with patients … touch them (patients)' (INM 9). When asked about their recommendations in this regard, participants indicated that, when possible, nurses could perform indirect care tasks and documentation away from isolation rooms. For example, one participant reported, 'I do recommend nurses to perform direct care only at patient's bedside … then shorten the period working in full PPE' (INM 2).

Physical exhaustion and psychological load were other challenges faced by ICU nurse managers. Participants noted that, 'It was crucial to consider nurses' well-being to enhance their performance' (INM 5). Another participant noted that, 'To reinforce nurses working with COVID-19, strategies to increase their (nurses) satisfaction could help … insurance coverage of nurses and their families, providing resilience training, and increase benefits' (INM 30).

4.1.2 | Equipment availability/accessibility

The availability of equipment, especially PPE, was a major challenge in ICUs during the pandemic. This was recognized as a serious problem by ICU nurse managers. Some participants noted that some facilities faced issues related to provision of equipment, beds, mechanical ventilators and PPE: 'Some equipment were scarce' (INM 26). Participants indicated that this shortage was notable in terms of PPE: 'We (administrators) tried hard to provide PPE for staff' (INM 9) and 'We (administrators) make hospital stocks high for minimum 3 to 6 months … I (ICU nurse manager) do suggest recruit PPE czar' (INM 18).

4.1.3 | Space availability

Participating ICU nurse managers expressed satisfaction with the strategies used to overcome limited space in ICUs during the pandemic, and most suggested the same strategies should be followed in future: 'Most of [the] facilities expanded space specified for ICUs to include yellow areas in emergency departments, high dependency units, and outpatient departments' (INM 10).

4.2 | Issues with family-centred care

There were two subthemes that encapsulated issues with family-centred care: communication and involvement in decisions.

4.2.1 | Communication

Participating ICU nurse managers reported that limited or no communication between patients and their families had a negative influence on the quality of care for those accessing care and nurses delivering care. Most participants recommended taking advantage of available technology: 'Using available technologies, for example, phones and video calls' (INM 29).

4.2.2 | Involvement in decisions

Engaging family members in patient care discussions and decisions was a challenge for health care providers during the pandemic. Some

participants suggested that 'Family members [should have a] virtual presence in daily rounds' (INM 13).

4.3 | Education and training

Many participating ICU nurse managers stated that continuous education and hands-on training were priorities during the pandemic. For example, one participant described the training needs of ICU nurses during the pandemic, noting that 'Our staff (ICU nurses) were in need to training sessions on using PPE, new therapies, in addition to resilience programs' (INM 1).

4.4 | Policy reforms

The COVID-19 pandemic resulted in policymakers modifying hospital policies to maximize the use of available resources. Participating ICU nurse managers reported that most of the policies that were changed covered staff scheduling, visitation and the admission criteria for the ICU. This theme had three subthemes: scheduling, visitation policy and admission policy.

4.4.1 | Scheduling

Participating ICU nurse managers reflected on how hospital administrators changed the staff scheduling policy to respond to the pandemic. For example, one participant reported that 'Duty has been changed from 8 h to 12 h and resignation stopped … study leave also stopped' (INM 2). Moreover, other strategies were implemented to overcome staff shortages, such as 'The administrators declined the quarantine period for ICU nurses from 14 days to 10 days and then 7 days provided that they (ICU nurses) got negative PCR results due to work needs' (INM 12).

4.4.2 | Visitation policy

Patients and families were affected by the changes in visitation policies. For example, one participant noted that there was 'No visitation and no attendants were allowed' (INM 12). Another participant commented that, 'I (ICU nurse manager) do suggest using virtual visitation to guarantee patient-family communication as well as healthcare providers-family communication' (INM 33).

4.4.3 | ICU admission policy

The limited ICU bed capacity and the increased number of patients with COVID-19 required administrators and policymakers to reconsider the criteria for ICU admission. For example: 'New criteria to determine what are the limits to trigger ICU admission' (INM 20).

5 | DISCUSSION

A key UAE health care goal is providing outstanding health care services. Consistent with this vision, the present study aimed to identify possible strategies to support responses to future similar situations by exploring the management lessons learned in dealing with COVID-19 pandemic in ICUs in the UAE. This study used a qualitative phenomenological approach; 37 in-depth interviews were held with ICU nurse managers, which allowed a deep understanding of participants' experiences and the identification of lessons learned that can inform better responses to similar crises in the future.

Our main findings were related to the management of an organisation's resources, providing family-centred care, continuous education and training for staff and the need for policy reform. These were 'must learn' lessons from ICU nurse managers' perspectives to ensure future management of similar crisis is efficient, easy and had less suffering and exhaustion for staff, patients and services.

In the present study, recommendations regarding maximizing the use of organisations' resources were perceived as the most important. ICU nurse managers stated that insufficient resources (e.g., lack of experienced human workforce, insufficient equipment and inadequate space) during the sudden onset of pandemic presented major challenges for hospital decision makers and administrators. This finding was consistent with previous studies that explored nurses' experiences during the COVID-19 pandemic (Lyman et al., 2022; Moradi et al., 2021; Vázquez-Calatayud et al., 2022). In response to the surge in critically ill patients with COVID-19, many units were converted to COVID-19 ICUs. Offering more ICU beds required managers to provide sufficient equipment and clinicians to use necessary therapies (e.g., high flow nasal cannula) (Chandel et al., 2021).

The present study highlighted that a serious resource issue was the lack of nurses with a critical care background. Consistent with the few previous studies that considered this issue (Catania et al., 2021; Lyman et al., 2022), the present findings suggested avoiding nurses working in a single unit and instead scheduling their rotation among units, including ICUs. It was also considered necessary to increase the nursing workforce through recruiting new nurses. The present study underlined the seriousness of the nursing skill mix, work overload and increased working hours wearing PPE. Nurse managers and policymakers should therefore develop new strategies to help manage available nursing resources, for example, adjusting nurses' shifts and increasing nurses' critical care competencies within the multidisciplinary team. In addition to managing nursing workforce resources, it is important to cope with nurses' resignations.

Family-centred care, education and training and policy reforms were also identified as important by participants in the present study. Few previous studies extracted such lessons and provided recommendations (Palese et al., 2021; Vázquez-Calatayud et al., 2022). However, such challenges merit attention and action from managers and policymakers. In terms of family-centred care, the present findings highlighted some important issues, including minimal clinician–family communication (nurse–patient and patient–family communication) as the only family meetings with ICU staff or patients were via phone calls. Most participants reported that because of increased numbers of critically ill patients with COVID-19, limited nursing time was available for family meetings. Furthermore, nurses spent most of their time at bedside wearing full PPE. Similar findings were reported in an another study (Piscitello et al., 2021). Routine communication and regular virtual meetings with other health care providers could help to overcome nursing time constraints. Moreover, use of available technologies to support family meetings with patients and allow their involvement in the decision-making process would help address the difficulties associated with restricted visitation. Other studies suggested similar strategies (Ashana & Cox, 2021; Azoulay et al., 2021; Sasangohar et al., 2021).

In terms of education and training, the present findings highlighted the important role of continuous education and in-service training in improving nurses' skill competencies when facing such a pandemic, for example, proper use of PPE, new therapies, infection control and self-protection measures in addition to resilience programmes. However, such findings did not emerge in previous studies (Catania et al., 2021; Moradi et al., 2021). A recent commentary (Lucchini et al., 2019) suggested that broadening nurses' competencies would be beneficial to their knowledge and skills. Our findings also highlighted policymakers' response to the surge of COVID-19 patients, in terms of some ICU policy reforms. Policymakers could develop new policies to guide practice (Burke et al., 2021) and re-evaluate the existing policies so they are more feasible to be applied in future pandemics (Valley et al., 2020).

5.1 | Limitations

The present study explored the management lessons learned during the COVID-19 pandemic from the perspectives of ICU nurse managers and did not include perspectives of ICU bedside nurses. Moreover, this study did not consider the cultural diversity among the nursing workforce in the UAE. However, it is recommended that further studies be conducted in other contexts so the findings can be generalized.

6 | CONCLUSIONS

This study contributed to an in-depth understanding of lessons learned and recommendations in dealing with a pandemic situation from the perspectives of ICU nurse managers in the UAE. The findings propose recommendations that may help in planning for the response to future crises, including maximizing organisations' resources, boosting family-centred care, providing continuous education and in-service training for nurses and modifying policies as necessary. Further research is needed to discuss policy reform while facing the COVID-19 pandemic.

7 │ IMPLICATIONS FOR NURSING MANAGEMENT

The present study demonstrated that all lessons learned, and recommendations suggested by ICU nurse managers need managerial intervention. ICU management needs to reconsider existing plans, policies, rules and available resources to effectively face similar future pandemics. Health care system collaborators should adopt pandemic surge response strategies to predict the projected supplies needed and provide adequate space while keeping the full hospital unit capacity, boost patient–family communication and guarantee regular family conferences. Furthermore, they should support the workforce through minimizing their exposure to infection, modifying their daily schedule, adjusting their workload and improving their well-being and resilience, in addition to decreasing their physical and psychological burdens. Policymakers can build a rewarding culture so that nurses are more committed to their workplaces. Boosting nurses in such ways is directly reflected in quality of patient care (Kieft et al., 2014).

CONFLICT OF INTEREST

There is no conflict of interest or personal relationship between the authors that could have appeared to influence the work reported in this paper.

ETHICAL CONSIDERATIONS

This study has been contacted according to declaration of Helsinki 1964. The study was approved by the University of Sharjah Research Ethics Committee (REC-21-01-16-01).

DATA AVAILABILITY STATEMENT

Authors do not wish to share the data.

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