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The Challenges Experienced by ICU Nurses in Kuwait during the COVID-19 Pandemic

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ABSTRACT

Background: The coronavirus (COVID-19) pandemic presented unprecedented challenges to healthcare systems worldwide, with intensive care unit (ICU) nurses at the forefront of patient care. To date, there is limited evidence into ICU nurses' experiences of the pandemic in Kuwait. **Research question/aims/objectives:** To elucidate the challenges faced by ICU nurses in Kuwait during the pandemic, by considering two research questions: "What contributed to intensified pressure for the ICU nurses?" and "How were the nurses affected?"

Research design: This was a qualitative study which utilised semi-structured interviews. Interviews were conducted between January 2021 and June 2022 with ICU nurses who worked during the COVID-19 pandemic. The data were analysed using Charmaz's grounded theory methodology.

Participants and research context: 25 nurses from three ICUs in Kuwait.

Ethical considerations: The study was approved by the University Ethics Committee and by the Ministry of Health in Kuwait.

Findings/Results: The analysis identified two themes (the factors contributing to intensified pressure in the ICU, and the impact on the nurses) and seven sub-themes. The pressure in the ICU intensified due to the rise in the number of patients, staff shortages, and the requirement to adhere to unrealistic new procedures for infection control. Restricted and cancelled leave, as well as impaired autonomy at work, impeded the nurses' ability to recover from stress. The heightened stress also contributed to a worsening in interpersonal relationships between the nurses and their colleagues. The nurses' care was compromised by these challenges, leading to moral distress and a range of mental health symptoms (e.g., stress, anxiety, emotional exhaustion).

Conclusions: The study accords with other research conducted during the pandemic in revealing a significant mental health toll among healthcare workers during the pandemic. The stressors were similar to those which have been reported in other studies, although there were also context-specific effects relating to the environment of the ICU and the Kuwaiti context.

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What is already known about the topic

- Healthcare workers globally experienced significant increases in workload as the COVID-19 pandemic unfolded.
- These pressures led to persistent ethical challenges regarding the best ways to care for patients, to look after one's own health, and to balance work and family commitments.
- A critical gap exists in understanding the experiences of healthcare workers in Kuwait during the pandemic.

What this paper adds

- The rapid rise in the number of patients, combined with a worsening in existing staff shortage issues, significantly increased pressure in Kuwaiti ICUs during the pandemic.
- Mandated overtime and restrictions on leave left the ICU nurses in Kuwait feeling overwhelmed by their working conditions.
- The ICU nurses experienced considerable moral distress and impaired mental health as they felt increasingly unable to meet their obligations at work and at home.

1. Background

Emerging in late 2019, the coronavirus (COVID-19) pandemic swiftly transcended national borders and exerted a devastating toll worldwide. As of October 2023, there have been more than 676 million confirmed cases and 6.9 million deaths globally from COVID-19 (Center for Systems Science and Engineering, 2023). Common symptoms include coughing, fever, and loss of taste and smell, progressing in the most serious cases to severe breathing difficulties and the requirement for mechanical ventilation (Huang et al., 2020). Risk factors increasing the risk of mortality include old age, underlying health symptoms, and obesity (Li et al., 2020).

As the pandemic unfolded, communities experienced seismic transformations as nations implemented sweeping measures – ranging from stringent lockdowns to social distancing protocols – in a bid to mitigate the virus's impact. However, whilst much of society remained in lockdown, hospital workers became busier than ever. Health infrastructure was mobilised at an unprecedented scale, placing an immense strain on hospitals and their staff. A growing body of literature is now revealing the impact on the healthcare workers who worked through this challenging and unusual period.

This study explores the challenges faced by intensive care unit (ICU) nurses in Kuwait, and how the nurses were affected by those challenges. Few previous studies have explored how the pandemic unfolded in Kuwait, yet the country has a distinctive context which may have affected the nature of the challenges faced. In particular, the demographic composition of the nursing workforce is unusual in the sense that a very high proportion of nurses are recruited from overseas (91.2% of nurses in Kuwait are non-Kuwaiti; Almotairi, 2020), following large recruitment drives from overseas to address nursing shortages (Atkinson, 2015). Moreover, the existing studies – nearly all of which have been conducted in Western or Asian nations – have not been able to explore how the distinctively Arabic and Islamic culture in Kuwait may have affected the challenges experienced.

1.1. Increases in workload

Recent research has elucidated the challenges experienced by healthcare professionals worldwide during the pandemic. Notably, numerous reviews have confirmed the prevailing experience of a tremendous increase in workload, following a rapid increase in the number of patients admitted with the virus (Chemali et al., 2022; Doleman et al., 2023; Koontalay et al., 2021). This occurred in the context of a global nursing shortage, which worsened during the pandemic because of illnesses and higher turnover rates (Buchan et al., 2022). Due to the combination of these factors, ICUs tended to be overstretched and operating at permanent capacity during the pandemic, as revealed in numerous reports (e.g., Douin et al., 2021; Liao et al., 2020; Sen-Crowe et al., 2020).

Other new challenges which emerged during the pandemic exacerbated these workload difficulties. Firstly, the novelty of the virus meant that staff found it difficult to rely upon published evidence or their clinical expertise when treating patients, which affected decision-making abilities (Doleman et al., 2023; Härgestam et al., 2023). Moreover, staff experienced considerable difficulties adapting to new procedures for infection control in the workplace, and with limitations in the availability and/or usage of personal protective equipment (PPE) (Chemali et al., 2022; Doleman et al., 2023; Koontalay et al., 2021). Finally, the literature also reveals certain challenges which were more specific to critical care staff, such as the responsibility of performing high-risk procedures such as cardiopulmonary resuscitation and endotracheal intubation and extubation (Ling et al., 2020).

1.2. Ethical challenges

In addition to the workload challenges experienced by healthcare workers during the pandemic, the literature also revealed a considerable increase in the number and complexity of ethical challenges that healthcare workers around the world were exposed to. Ethical challenges can be defined as circumstances in which “there are two possible choices of action, but both cannot be done; there are morally justifiable reasons to make either choice, and regardless of the choice made, a moral failure also occurs” (Copeland and Arnold, 2021, p. 1). In short, healthcare workers during the pandemic faced more situations in which they found it difficult to judge the ‘right’ or ‘wrong’ way to act.

For example, the literature reveals serious concerns about the impact on patient care. As the workload increased, staff worried about their ability to offer adequate support to patients, and felt as though they were failing in their duty of care (Bergman et al., 2021;

Liu et al., 2022). Nurses described how they were unable to provide their preferred nursing interventions due to a lack of time, resources, competence, and/or medical and technical equipment, and instead witnessed the ICU being “turned into something comparable to an industry assembly line, where patients lined up in rows and were given the same kind of treatment” (Bergman et al., 2021, p. 471). The nurses were unable to offer a level of care and support which met their high standards, and experienced distress as a result (Bergman et al., 2021).

The global PPE shortages at many hospitals (Burki, 2020) also introduced the ethical dilemma of whether one should continue working with insufficient protective equipment when doing so would increase the risk of spreading infection (Maraqa et al., 2021). This was a particular worry for nurses who were caring for immune-compromised patients, for whom an infection could prove fatal (Marks et al., 2023). The nurses recognised that working with inadequate PPE increased the risk of transmitting an infection to such patients, but also knew that refusing to work in these conditions would result in at-risk patients receiving insufficient care. There was no alternative but to continue with an option which would lead to some form of harm.

Fears about infection risk also extended to concerns for one’s own family and own personal health, and the conflict this posed regarding the duty of care for patients. Nurses recognised their duty of care to patients, but also understood that they needed to protect their own health and that of their loved ones (Alloubani et al., 2021; Liu et al., 2022; Munoz-Rubilar et al., 2022; Sperling, 2021). As a result, they struggled with the ethical conflict around whether it would be morally justifiable to withdraw care if these risks became too high (Munoz-Rubilar et al., 2022).

Finally, there were also ethical conflicts relating to resource allocation under conditions of scarcity. There were scarce resources in the ICU, and so critical care staff had to make difficult judgements about which patients were most in need of the support (Gebreheat and Teame, 2021). In addition to having to make difficult decisions about withdrawing resources from a patient, there were also harms caused by a failure to withdraw resources; moral distress among critical care nurses was highest when no one withdrew ventilator support to a hopelessly ill person, when another patient may have benefited from that support (Andersson et al., 2023).

Due to these persistent ethical challenges, healthcare workers experienced moral distress (“an unpleasant feeling that arises when one is forced to behave in such a way that it violates one’s personal beliefs and values about what is right and what is wrong”; Malliarou et al., 2021, p. 88) and moral injury (“a long-lasting psychological and emotional effect that arises from actions that run in opposition to one’s personal moral values or beliefs”; Hossain & Clatty, 2021, p. 24) (Riedel et al., 2022; Rushton et al., 2022). Consequently, their mental health suffered, with rises in stress, depression, anxiety, fear, grief, guilt, anger, isolation, uncertainty, and helplessness reported among healthcare workers (Riedel et al., 2022). The same symptoms were even more prevalent among ICU staff specifically (Gormez et al., 2021; Gupta and Sahoo, 2020; Wozniak et al., 2021). These conditions likely also contributed to the worsening staff shortage issues, because moral distress is also associated with higher rates of burnout and high staff turnover (Gutormson et al., 2022; Karakachian and Colbert, 2019; Poon et al., 2022).

1.3. Challenges in Kuwait

Studies from around the world have shed light on the profound impact of the pandemic on healthcare professionals. However, a critical gap exists in understanding the experiences of healthcare workers in Kuwait. To date, relatively few studies have explored how the pandemic unfolded in Kuwait. Those that have been conducted are largely cross-sectional survey studies, which have revealed that healthcare workers in Kuwait experienced relatively high levels of depression and anxiety during the pandemic (Alkandari et al., 2022; Alsairafi et al., 2021; Aon et al., 2020; Alsafran et al., 2022; Taghaddom et al., 2020), and an increase in sleeping difficulties and medical errors (Abbas et al., 2021). However, none of these studies focused on ICU nurses in particular. Moreover, the use of quantitative methodologies results in limited depth and richness regarding the healthcare workers’ experiences.

Only one qualitative study of the experiences of healthcare professionals in Kuwait during the pandemic has been conducted. Physicians who worked through the pandemic were interviewed, and reported challenges including overwhelming pressure to keep up with new cases, long working hours, fears for personal safety, shortages in PPE, and internal ethical conflicts (Alsaeed et al., 2023). This provides a useful starting point for experiences of the pandemic in Kuwait. However, these data need to be complemented with the narratives of healthcare workers in different professions and contexts to give a fuller understanding of the challenges which arose in Kuwait.

To address this knowledge gap, the purpose of this paper is to explore the challenges experienced by ICU nurses in Kuwait during the COVID-19 pandemic. The findings are valuable as a foundation for evidence-based policies and interventions tailored to the specific needs and experiences of healthcare workers in Kuwait, and also contribute to the broader global discourse on pandemic preparedness and response (Haddad, 2023).

2. Methods

2.1. Study design

Data were collected through semi-structured interviews with ICU nurses who worked during the COVID-19 pandemic. The use of interviews aligned with the researchers’ constructivist epistemology, as they enabled knowledge about the phenomenon under investigation (i.e., the experiences of ICU nurses in Kuwait during the COVID-19 pandemic) to be constructed with the research participants through dialogue, in which interviewer and interviewee could negotiate meaning and develop a shared understanding.

The data were analysed using Charmaz’s (2006) approach to grounded theory, as part of a wider research project which explored the question: “What did it mean to be a good ICU nurse in Kuwait during the COVID-19 pandemic?” (our full grounded theory,

including the core explanatory category, is reported in a complementary paper which integrates this analysis with an exploration of how nurses coped with the challenges they faced). Using Charmaz's grounded theory ensured that the analysis was primarily grounded in the nurses' reported experiences, whilst also encouraging the analyst to draw upon prior insight and utilise creative interpretation (Singh and Estefan, 2018). The aim was to create a substantive theory, specifically associated with the context of ICUs in Kuwait during the COVID-19 pandemic. However, it was also recognised that certain aspects of the theory would be generalisable to the experiences of ICU nurses more broadly, and so there were also aspects of formal grounded theory.

2.2. Sample and context

The research was carried out across three public hospitals in Kuwait, offering a cross-section of the country's public healthcare facilities. The ICU capacities at the hospitals ranged from 21 to 40 beds, and the number of ICU nurses employed at each ranged from 86 to 243. There were recognised nursing shortages at each site, exacerbated during the pandemic, which hospital authorities attempted to address by moving nurses from other hospital departments to the ICU as additional support. Data on patient demographics and case mix was not shared by the hospitals.

Information about the study was distributed to ICU nurses within these establishments. The interviewer (this paper's lead author) – a Kuwaiti national with a history of ICU nursing – made himself available to answer any questions about the study. However, only seven nurses expressed interest in participating during this initial recruitment, likely due to the considerable workload demands at the time. Consequently, a snowball sampling technique was adopted, encouraging interested nurses to encourage their peers to take part. Simultaneously, we enlisted the support of the hospitals' Directors of Nursing to further promote participation. This approach allowed us to expand our participant pool and reach a point of theoretical saturation during the interview process.

To be eligible for participation, the individual was required to have at least six months' experience as an ICU nurse, and to have worked as an ICU nurse in Kuwait at some point during the COVID-19 pandemic. Additionally, they needed to be able to communicate in either English or Arabic. Overall, 25 ICU nurses were interviewed across the three sites. 23 of the nurses (92%) were non-Kuwaiti, closely approximating the nursing workforce demographics in the country as a whole. The most common nationality was Indian (16 nurses, 64%). All participants elected to be interviewed in English. As Table 1 shows, the participants were diverse with respect to gender, nationality, age, and level of ICU experience. Pseudonyms have been used to protect participant confidentiality.

2.3. Ethical considerations

471 information packets about the study were sent to ICU nurses at the three sites (available in both English and Arabic), and additional information was disseminated through staff noticeboards and mailing lists. The study information made clear that participant's right to privacy would be respected, with confidentiality maintained by pseudo-anonymising the data. Additionally, it made clear that participants had the right to refuse to participate or withdraw from the study at any time, without having to give a reason nor face any penalty for doing so. Finally, the potential benefits of the research were also highlighted (e.g., it enabled grievances to be aired in an appropriate manner), and the mitigation of potential harms was described (e.g., participants were offered professional

Table 1
Characteristics of the sample.

Interview No.	Name (Pseudonym)	Age Band	Role	Nationality	Gender	Years of ICU Experience	Date of Interview
1	Rajesh	30-34 years	Staff nurse	Indian	M	6-9 years	29 Jan 2021
2	Virat	30-34 years	Staff nurse	Indian	M	10-14 years	30 Jan 2021
3	Aadil	30-34 years	Staff nurse	Indian	M	6-9 years	30 Jan 2021
4	Fatima	35-39 years	Staff nurse	Indian	F	10-14 years	12 Mar 2021
5	Shivani	30-34 years	Staff nurse	Indian	F	6-9 years	24 April 2021
6	Abdullah	25-29 years	Staff nurse	Kuwaiti	M	Less than 3 years	11 Mar 2022
7	Munira	30-34 years	Staff nurse	Kuwaiti	F	Less than 3 years	14 Mar 2022
8	Inaya	40-44 years	Staff nurse	Indian	F	15-19 years	24 Apr 2022
9	Anika	30-34 years	Staff nurse	Indian	F	6-9 years	26 Apr 2022
10	Meera	30-34 years	Staff nurse	Indian	F	10-14 years	26 Apr 2022
11	Shreya	30-34 years	Team leader	Indian	F	10-14 years	27 Apr 2022
12	Akshara	30-34 years	Team leader	Indian	F	10-14 years	27 Apr 2022
13	Rahul	30-34 years	Team leader	Indian	M	6-9 years	27 Apr 2022
14	Youssef	25-29 years	Staff nurse	Other	M	6-9 years	22 May 2022
15	Mirza	45-49 years	Staff nurse	Indian	F	10-14 years	24 May 2022
16	Saanvi	40-44 years	Staff nurse	Indian	F	15-19 years	24 May 2022
17	Krish	35-39 years	Staff nurse	Indian	M	15-19 years	25 May 2022
18	Divya	45-49 years	Team leader	Indian	F	15-19 years	26 May 2022
19	Angela	45-49 years	Team leader	Other	F	10-14 years	27 May 2022
20	Nathaniel	45-49 years	Team leader	Other	M	20 years or more	3 June 2022
21	Samay	40-44 years	Team leader	Indian	M	15-19 years	7 June 2022
22	Jasmine	35-39 years	Staff nurse	Indian	F	20 years or more	7 June 2022
23	Navi	45-49 years	Team leader	Indian	F	20 years or more	8 June 2022
24	Mariam	20-24 years	Staff nurse	Other	F	Less than 3 years	8 June 2022
25	Gabriel	50-54 years	Team leader	Other	M	15-19 years	8 June 2022

counselling support, in case they experienced emotional distress during the interviews). Participants were required to read this information packet and sign a form to indicate that they were providing their informed consent to participate. As a result of these provisions, the study received approval from the University Ethics Committee [FHMS 19-20 001 EGA] and the Ministry of Health in Kuwait [2020/1274].

2.4. Data collection

The interviews followed a topic guide (a set of open-ended questions), although unplanned follow-up questions were also used to probe for further information on interesting new topics. The topic guide was independently reviewed by experts in nursing and grounded theory, and piloted with one interviewee before being further refined. The analysis occurred iteratively alongside the data collection, enabling the lead author and co-authors to frequently discuss the emerging themes and insights in the developing theory. The interviews continued until saturation was reached, when it became apparent that new interviews were not adding significant new information or insights to the emerging themes and concepts identified through previous data analysis.

The interviews were conducted between January 2021 and June 2022, when social distancing measures were in place and face-to-face contact was not possible. Therefore, the interviews were conducted remotely, using Zoom videoconferencing. Each interview lasted approximately one hour. The audio was recorded from each interview, and was transcribed verbatim by the lead author before analysis. NVivo Version 12 was used for data management and analysis.

2.5. Data analysis

We consider two research questions in the analysis: “What contributed to intensified pressure for the ICU nurse?” and “How were the nurses affected?”. To perform the analysis, we conducted an initial coding process of line-by-line coding, in which each line of every interview transcript was assigned a code (describing the data and representing an emerging concept or theme). Next, we performed focused coding by organising these codes into larger categories, based on their thematic similarities. This process involved systematically reviewing and comparing the codes to identify patterns, connections, and relationships between concepts. The constant comparative method was used throughout the analysis, by repeatedly comparing the new data to previously collected and analysed data to further support the identification of emerging concepts, categories, and relationships. Finally, we performed theoretical coding by integrating and refining the major categories identified during focused coding to develop a cohesive theoretical framework representing the challenges the nurses faced (which directly informed the full grounded theory reported in our follow-up paper).

The trustworthiness of the data was established in several ways. Firstly, the interview transcripts underwent a process of peer review, whereby the study co-authors (experienced researchers in nursing and qualitative research methods) reviewed and provided feedback on the transcripts on an ongoing basis. This helped to ensure the accuracy of the data, and also enabled the co-authors to offer valuable feedback on which topics should be further probed in subsequent interviews. Additionally, the analyst shared the interview transcripts with the research participants in post-interview debrief sessions, enabling them to confirm that the data had been transcribed accurately and offer clarifications where needed.

As per Charmaz's (2006) recommendations, the analyst further ensured research rigour by consciously developing theoretical sensitivity (the capacity to recognise and extract the most important elements of the data for the emerging theory; Chun Tse et al., 2019) and reflexivity (a rigorous interrogation of one's own knowledge and how it might influence the data analysis process; Hertz, 1997) during the analysis. This involved writing memos and regularly updating a reflective journal to document relevant actions, thoughts, and experiences. Additionally, the researcher conducted a detailed literature review before the study, allowing for a comparison between his own experiences and existing academic literature on the topic. The researcher also had extensive personal insight from more than a decade of experience as an ICU nurse in Kuwait and internationally (in Australia). The results of the literature review served as a broad theoretical framework to anchor the interpretation of the interview data, supporting the development of grounded theory. However, it was also recognised that the main analytic themes needed to be derived directly from the interviewees, instead of being biased by personal experiences. In this way, the analysis incorporated personal insight and prior research whilst also remaining grounded in the interview data.

3. Results

The theoretical coding process led to the identification of two themes describing the nurses' main challenges: factors contributing to the intensification of pressure, and the impact upon the nurses. Four sub-themes comprised the factors contributing to pressure (More patients, less support; No rest, no recovery; Strained relationships; No choice, no voice), and three sub-themes comprised the impact on the nurses (Compromised care; Moral distress; Deteriorating mental health).

3.1. What contributed to intensified pressure for the nurses?

The interviews revealed that in the ICU pressure was significantly intensified during the pandemic due to multiple factors. There were increasingly more patients admitted to the ICU, with less support available due to worsening staff shortages. The requirement for long working hours and the cancellation of annual leave made the nurses feel as though they had limited opportunities for rest and recovery. The constant pressure they experienced strained their day-to-day relationships with others. Stress was exacerbated by the limited autonomy they experienced, leaving them to feel as if they had no choice over their work and no voice to raise concerns. These

Table 2
Exemplar quotes to summarise the challenges faced by the ICU nurses.

Focused coding category	Initial coding category	Supporting interview data
More patients, less support	Increase in the number of patients	<p>“We are facing so many [cases], even from youngsters to old people are coming with the COVID” (<i>Saanvi</i>)</p> <p>“It was very difficult during COVID... all these patients is coming... Any admission can be come at one second” (<i>Mariam</i>)</p> <p>“Before [Covid] means we have acceptable [diagnosis]... we will get a time to prepare for everything. But during this pandemic... it’s continuous. Always beds will be full” (<i>Rajesh</i>)</p>
	Staff shortages and resignations	<p>“Many of the staff are resigning and many [are] sickly because of hard duty” (<i>Shivani</i>)</p> <p>“I think many are resigning. There was a lot of resignation from here... I came at 2014. In my batch... I think about 50% already resigned and they left. Now, many are going for resignation also, so maybe stress factor, there are stress factors and everything”. (<i>Virat</i>)</p> <p>“I know the staff nurses who quit their job, they left from here, Kuwait... Many nurses they left here, just because of the stress or the situations in here” (<i>Akshara</i>)</p>
	Worsening in the nurse-to-patient ratio	<p>“So, there were severe shortage of staffs that time. We went through a very difficult situation... During pandemic time, we got three patients for one staff. It was very difficult for us because [these were] critical patients” (<i>Saanvi</i>)</p> <p>“[Because of] the [staff] shortage, you have to do everything. Double work” (<i>Mariam</i>)</p> <p>“One concern [is] about the patient outcome... now it’s okay, but [at] that time, there was scarcity of staff and so many resignations, like that. So very few times, we are taking care of two ventilated patients together in one shift and [doing] this 12 hours [shift].” (<i>Aadil</i>)</p> <p>“If any patient got sick or anything, [if he may] crash, so there will be more problem because some staff have to see two patients at a time” (<i>Virat</i>)</p>
	Unrealistic infection control procedures	<p>“Proper handwashing, hand rubbing, that all information we got from this infection control ... each time they’re coming and telling, just hand rub, hand rub... if you’re busy with work, if you have no time for handwashing, just hand rub, hand rub, like that” (<i>Aadil</i>)</p> <p>“Before there was no tissue paper ... then they said if [hands are] only visibly [dirty], and the hands are only visibly dirty, we have to wash the hands otherwise [it’s okay].” (<i>Shivani</i>)</p> <p>“We are getting shortage in this glove or like that ... so it is affecting the care also... they’re giving only three gloves in each shift ... how [can] we can give [adequate] care? I don’t know, because we are entering the room with one glove, and we are assessing the ventilator parameters with the same gloves ... we are touching the patient with the same gloves ... it is not good for the patient if we are spreading an infection to them... Sometimes infections may spread like that.” (<i>Fatima</i>)</p>
No rest, no recovery	Long working hours	<p>“We had four months of 12-hour shifts... that was really horrible... it is difficult, but something we have to do... Staff shortage, we are overcoming with the overtime” (<i>Shivani</i>)</p> <p>“Doing 12-hours duty means it was extremely tired. During the COVID situation it was for three months in our hospital... I think the whole nurses in our hospital were in stress because we cannot manage our stress physically” (<i>Inaya</i>)</p>
	Physical demands	<p>“We don’t have time for a single cup of water, [we were] that much busy... maybe we will stand from seven till two o’clock” (<i>Anika</i>)</p> <p>“We have to go through maybe a minimum of three or five proning for each day, each shift. We will be tired... Physically also, we will be tired” (<i>Virat</i>)</p>
	No breaks	<p>“If we are not getting a break, all will get tired. So all are human beings, there will be no superheroes” (<i>Meera</i>)</p> <p>“So all are under pressure or the stress, just because of that. No break, without break we are working” (<i>Akshara</i>)</p>
	Cancellation of annual leave	<p>“February onwards, all leave [is] cancelled... In one and a half years, we didn’t spend time with family... I know many staff, they are mentally struggling because they cannot see [their families]” (<i>Virat</i>)</p> <p>“Mental stress, especially it happens for me during the pandemic times, because I am alone here in Kuwait. I didn’t go home for almost two and a half years. That is the mental stress for me, because I am thinking, why I am here, why I cannot take care of my family” (<i>Angela</i>)</p> <p>“We feel very stressed... During the pandemic, there was no flight when the family members were sick, especially the father and mother. When they were sick and they were not able to meet them, or they were not able to help them in those situations. I feel that they were broke down, and they feel that their life is meaningless like that” (<i>Inaya</i>)</p>
Strained relationships	Issues with doctors	<p>“If we are doing mistake, then they [doctors] will shout. And in panic time also they will shout... They will really give stress to the nurses” (<i>Divya</i>)</p> <p>“Sometimes they [doctors] will ask for something that is not available here. And they’ll be really upset. They don’t have the patience to wait for one minute or two minute. They’ll be shouting us. And we’re running from place to place to get those items and all. But that time we’ll be feeling very, very stressful... mentally, we will be under serious stress” (<i>Samay</i>)</p> <p>“Sometimes the doctor side, they are not understanding what situation we are in. Maybe we are busy with our patients, so they want to do something else. They’re not giving [time] for the preparation or time to prepare for the preparation... that makes us more panic and under stress” (<i>Akshara</i>)</p>
	Issues with other nurses	<p>“Some people [work colleagues] are mean... [they] may [also] feel some stress during work” (<i>Saanvi</i>)</p> <p>“If one is lazy to work, then we [the whole nursing team] can’t work also” (<i>Divya</i>)</p>
No choice, no voice	No concern for nurses as humans	<p>“I think administrative levels are thinking like the nurses are a working material, which is not like that. [We are] humans, so consider us” (<i>Akshara</i>)</p> <p>“Mentally you are stressed because you cannot see your family, it’s like that feeling. You cannot do anything [about it], like really helpless, depressed, frustrated” (<i>Angela</i>)</p>

(continued on next page)

Table 2 (continued)

Focused coding category	Initial coding category	Supporting interview data
	Power imbalance	"If any patient condition [deteriorates], sometimes the consultant is getting angry... We can communicate with the junior doctors about how the patient is... [but] sometimes we cannot tell to the consultant about that" (<i>Fatima</i>)

themes (exemplar quotes for which are shown in Table 2) represent the challenges that ICU nurses described needing to overcome during the pandemic.

3.1.1. More patients, less support

Several factors contributed to worsening in the nurse-patient ratio during the pandemic, increasing the nurses' workload. Notably, the surge in COVID-19 cases led to a rapid influx in patients in the ICU. Saanvi described "so many [cases]... even from youngsters to old people... coming with the COVID". Rajesh concurred, remarking that before the pandemic "we have [acceptable] diagnosis... we will get a time to prepare for everything", but that this became afterwards because "always beds will be full". His comment reveals a return to a more task-based way of working, with the nurses having to focus solely on the essential aspects of care. The ability to offer more holistic care – which was recognised as an expectation of the good nurse – was thwarted.

This challenge was exacerbated by the worsening staff shortage issues. Virat estimated that "In my batch... I think about 50% already resigned", and Aadil similarly described how there were "so many resignations" during the pandemic. Virat and Akshara both attributed resignations to the stress in the ICU, and Shivani similarly put it down to "hard duty". Akshara also noted that some international nurses not only resigned but also "left from... Kuwait", implying the difficulties were perceived to be endemic across the country.

Consequently, there was considerably more work to do, and fewer nurses available to do it. Although the ICU aimed to maintain a nurse-to-patient ratio of one-to-one (typical for ICUs because of the severity of the patients' condition; Thompson and Kaufman, 2014), this goal was impeded during the pandemic. Virat reported having to see "two patients at a time", whereas Saanvi believed it was more like "three patients for one staff". This mirrors other reports of ICUs exceeding their capacity during the pandemic (e.g., Douin et al., 2021; Liao et al., 2020; Sen-Crowe et al., 2020). For Aadil, this raised a clear "concern... about the patient outcome". Indeed, it has been shown elsewhere that ICU strain is associated with higher mortality risk (Wilde et al., 2021), confirming that these working conditions posed a threat to patient safety.

Finally, attempts to cope with the increased workload were also frustrated by issues regarding unrealistic infection control procedures. For example, the nurses spoke of having to disregard the official advice on onerous infection control procedures, and instead just wash their hands when they were visibly dirty. Aadil described how, "If you're busy with work, if you have no time for hand-washing, just hand rub, hand rub", and Shivani similarly noted that "if [hands are] only visibly [dirty]... we have to wash the hands, otherwise [it's okay]". Moreover, shortages in the availability of PPE actually made it often impossible to follow the official guidance. Fatima complained, "They're giving only three gloves in each shift... how [can] we give [adequate] care? ... It is not good for the patient if we are spreading an infection to them". Overall, the nurses were clearly not given the support – in terms of either the availability of the PPE, or the time to follow proper hygiene control procedures – to prevent the spread of infection in the ICU. This mirrors concerns around the availability and/or usage of PPE reported elsewhere during the pandemic (e.g., Chemali et al., 2022; Doleman et al., 2023; Koontalay et al., 2021).

3.1.2. No rest, no recovery

To address the rise in the number of patients, overtime was mandated. Inaya described how this left many of the nurses feeling "extremely tired", and Shivani described the situation as "really horrible". This significantly added to the nurses' overall workload, leaving them feeling more physically and mentally tired. Meera stressed that "[we] all are human beings, there will be no superheroes", challenging a prevailing narrative during the pandemic should be lauded for their heroic and apparently superhuman abilities (e.g., Rees, 2022; Nasaif et al., 2023). Indeed, a detailed critique of the 'hero discourse' during the pandemic argues that it is problematic in the sense that it normalises nurses' exposure to risk and preserves the power imbalances which limit the ability of front-line nurses to challenge unsafe working conditions (Mohammed et al., 2022). Power differentials and limited autonomy were also recognised by the ICU nurses in Kuwait, as subsequent sections will elaborate.

As well as having to work for longer, the nurses' working lives also became more physically demanding, for a variety of reasons. Virat described having to do "[a maximum of] 10 proning" procedures each day, leaving him feeling very tired. The nurses were also required to be on their feet for long periods of time, "from seven till two o'clock" according to Anika. These working practices contravene Kuwaiti working regulations (which stipulate that workers should not work more than five consecutive hours without a 15-minute break), but were understood as unfortunate realities of the pandemic. Finally, opportunities for nourishment were also limited. Anika described how the nurses were so busy that they did not have time for a "single cup of water".

Another factor impeding the nurses' ability to recover psychologically was the cancellation of their annual leave during the pandemic. The Kuwait Ministry of Health imposed this policy in response to rising infection numbers (Arab Times, 2021), but it caused considerable discontentment among the ICU nurses, especially among international nurses who were unable to visit their families. As a result, Virat described how staff were "mentally struggling because they cannot see [their families]". Inaya described an even deeper existential toll of this policy, saying that many international nurses began to feel "broke down" and "that their life is meaningless" due

to being unable to see or care for loved family members abroad.

3.1.3. Strained relationships

As the work pressure intensified, relationships among the healthcare team became strained. Nurses reported mistreatment by doctors. Divya reported that “If we are doing mistake, then they [doctors] will shout”, and Samay similarly said that “they’ll be shouting [at] us”. Both recognised the stress this put the nurses under, with Samay describing it as a “very stressful” working environment which placed the nurses “under serious stress”. It was believed that these types of situation arose because the doctors failed to appreciate the nurses’ working realities. Samay described how the doctors “don’t have the patience to wait for one minute” while the nurses strove to fulfil their unrealistic expectations, and Akshara agreed that the doctors are “are not understanding what situation we are in”.

The extreme pressure in the ICU also impacted the nurses’ relationships with one another. While nurses generally appreciated and relied upon each other’s support as a team, there were reports of interpersonal challenges. For example, Saanvi described how “some people [are] mean” due to the stress they felt, Mariam commented that some nurses “are not cooperative”, and Divya believed that some of her colleagues were “lazy”. These comments reveal that the ICU pressure significantly strained working relations between colleagues.

Table 3

Exemplar quotes to summarise the impact of working as an ICU nurse during the COVID-19 pandemic.

Focused coding category	Initial coding category	Supporting interview data
Compromised care	Rushed care	“Sometimes I forget [and make errors]. Sometimes [when I’m] very fast [in hurry] ... If the [other] staff is busy, I cannot do anything, very busy with the patient. If they have two patients, they will not come. So, my patient care and their patient care are compromised” (<i>Shivani</i>)
	Infection risk	“How [can] we give [adequate] care? I don’t know, because we are entering the room with one glove, and we are assessing the ventilator parameters with the same gloves... we are touching the patient with the same gloves... it is not good for the patient if we are spreading an infection to them.” (<i>Fatima</i>) “If you’re busy with work, if you have no time for handwashing, just hand rub, hand rub, like that” (<i>Aadil</i>)
Moral distress	Perceived failure at work	“Especially when the patient deteriorates suddenly and [I begin to suspect] the assessment [might have] been wrong? Did I not do my job, I mean, as I was supposed to?” (<i>Munira</i>) “You know the feeling that you cannot finish your work, you are becoming tired, and mentally you are stressed because you cannot see your family, it’s like that feeling, like you cannot do anything.” (<i>Angela</i>)
	Perceived failure at home	“We cannot even meet the family before my baby wakes up, I go for duty. After she sleeps, I come back to [from the] duty ... I cannot see her for some days and she’s here ... I cannot accept that, it is very difficult for me” (<i>Shivani</i>) “We are not seeing [our family], [we are] without family, [for a] long time... I can only watch my child, means video call only... I know that they have no emotional attachment with me... Maybe my father, mother and my wife can understand, but child cannot understand that one” (<i>Virat</i>)
Deteriorating mental health	Anxiety	“We don’t know ... some of our colleagues are getting positive [COVID-19 tests], so we are [having] very many anxieties, having anxiety about just tomorrow what will happen [to us]... same thing, we are thinking [about] our father or mother or family members” (<i>Aadil</i>) “So I was more worried in the first days, because you don’t know what will happen. Even that time I used to read a lot in the newspapers ... So you’re reading that. Like I was reading that... out of 100 this many days, this many medical people [healthcare workers] died” (<i>Krish</i>)
	Fear	“So as these mortality cases really accelerate during this COVID-19 and we are too much having fear that we are... Fear or threat that we will be infected with a disease” (<i>Gabriel</i>) “We were scared of COVID-19 ... we didn’t know what [or] how it happens ... we were too scared, and we were not eating and tired for 12 hours” (<i>Shreya</i>)
	Sadness	“And if the staff is mentally not strong, I know she or he also started some crying. It’s very difficult” (<i>Shreya</i>) “Like really helpless, depressed, frustrated because of overlapping of assignment” (<i>Angela</i>)
	Guilt	“I have to come for duty, and I have to take care of my kids. My husband also has to go attend for duty. So my small children [are at home], [and] nobody is there to take care... This is a really major stress, and it is causing poor tension... Who will take care of them?” (<i>Navi</i>) “We are not seeing [our family], [we are] without family, [for a] long time... I can only watch my child, means video call only... I know that they have no emotional attachment with me... Maybe my father, mother and my wife can understand, but child cannot understand that one” (<i>Virat</i>)
	Frustration	“Everything, it’s hike now [in prices], not like before. We really have to struggle a lot financially” (<i>Jasmine</i>) “Like really helpless, depressed, frustrated because of overlapping of assignment” (<i>Angela</i>)
	Helplessness	“[You are] away from your family, and you cannot do anything. The ministry is not allowing us to go. Our leave was held” (<i>Angela</i>) “Like really helpless, depressed, frustrated because of overlapping of assignment” (<i>Angela</i>)
	Overwhelmed	“Especially when the patient deteriorates suddenly and [I begin to suspect] the assessment [might have] been wrong? Did I not do my job, I mean, as I was supposed to? ... It’s just really so much pressure” (<i>Munira</i>) “And [if] the leaders are not physically ill, they are mentally stressed. In case of me, even if I am team leader for two days continuously, I’ll be very sick, like my head is going to break” (<i>Shreya</i>)
	Exhaustion	“You know the feeling that you cannot finish your work, you are becoming tired, and mentally you are stressed because you cannot see your family, it’s like that feeling, like you cannot do anything” (<i>Angela</i>) “So I was doing just whatever is necessary, only that, and I was also so tired” (<i>Anika</i>)

3.1.4. No choice, no voice

Finally, the nurses perceived impaired autonomy during the pandemic, which worsened their ability to cope with stress. They felt compelled to passively accept increasingly challenging and unsustainable working condition, as the alternatives were even more damaging. For example, Angela bemoaned the fact that “you cannot do anything” about the cancellation of leave, and Shivani complained that overtime was “something we have to do”, rather than something they could opt in or out of. However, the nurses felt that they lacked any legal recourse to challenge such policies. Similarly, Akshara’s comment about doctors “not understanding what situation we are in” also reflects the nurses’ inability to challenge unrealistic expectations. They are in a position of more limited power within the hospital and are expected to follow doctors’ orders, and so had no option but to comply with orders which they knew to be unrealistic.

The impact of power imbalances on the ability to challenge authority was also highlighted by Fatima. She described that, “If any patient condition [deteriorates], sometimes the consultant is getting angry, [then] also we can communicate with the junior doctors about how the patient is... Sometimes we cannot tell to the consultant about that”. In addition to reaffirming that tempers were frayed in the ICU, this comment also adds nuance to the nature of the power relationships between nurses and doctors. As Fatima suggests, the nurses felt unable to speak openly to senior consultants due to fear of being shouted at, and so withheld information from them. Instead, they could only relay their concerns openly to junior doctors, who themselves had more limited power and were therefore considered more approachable by the nurses. This is another, more indirect, way in which patient care was compromised, because the most effective care can only be provided when staff are comfortable to communicate openly with each other.

Finally, there was also the sense among many nurses that management cared only about their capacity to work, and disregarded their fundamental human needs. Akshara summed this up by saying they were treated as “working material” only. Angela commented that the situation left them feeling “really helpless, depressed, frustrated”. Overall, these comments revealed a degree of passivity and mental resignation which is suggestive of learned helplessness (Peterson and Seligman, 1983), which is a phenomenon associated with depression and related mental health issues (Tayfur, 2012). In short, the nurses’ experiences had taught them that they had no autonomy to challenge poor or unfair working conditions, and eventually stopped trying. Instead, they took it upon themselves to cope the stressful circumstances as best they could, because they knew their only other option was to resign. Indeed, nurses who experience learned helplessness are more likely to leave their role (Cowden and Cummings, 2011; Moreland et al., 2015), and so this general climate was likely implicated in the ICUs’ high resignation rates.

3.2. How were the nurses affected?

As the ICU pressure intensified, the nurses felt increasingly unable to live up to their expectations for themselves. They felt that their ability to offer quality patient care was compromised, but saw no way to improve the situation. This, and a perceived failure to meet obligations in their family lives, resulted in significant moral distress. As a result of these experiences, the nurses experienced impaired mental health and exhaustion. Table 3 shows exemplar quotes revealing perceptions of compromised care, moral distress, and a range of mental health symptoms.

3.2.1. Compromised care

The nurses understood their patient care was affected by the heightened pressure of the pandemic. The worsening in the nurse-patient ratio led to a more rushed care process, with less time for diagnosis, assessment, treatment, and supporting colleagues. It also led to worries about a greater risk of making errors. Describing such factors, Shivani concluded that “my patient care [is] compromised”. Similarly, Aadil noted “concern about the patient outcome” as an inevitable result of their working conditions.

Additionally, care was further compromised by persistent issues with shortages in personal protective equipment (PPE) and the implementation of unrealistic infection control procedures. For example, Aadil noted that the nurses had “no time for handwashing” due to being busy, and had to re-use gloves for different patients. Bemoaning this situation, Fatima asked “How [can] we give [adequate] care?” and recognised that “it is not good for the patient if we are spreading an infection to them”. She knew that re-using gloves increased this risk, but felt constrained by limited alternatives.

These descriptions accord with other accounts of ICU nursing during the pandemic. For example, in the study by Bergman et al. (2021) in Sweden, critical care nurses reported their beliefs that patient safety and quality of care were compromised during the pandemic due to a considerable increase in workload combined with resource shortages. Similarly, the study in China by Liu et al. (2022) showed recognition among nurses that effective nursing care was made far more challenging due to the heightened workload and insufficient PPE.

3.2.2. Moral distress

After recognising how their care was compromised by the challenges of the pandemic, an immediate response for many of the nurses was what has been referred to as moral distress. Fatima recognised that PPE shortages and unrealistic infection control procedures increased the risk of an infection outbreak, and were ultimately “not good for the patient”. However, the alternative would have been to delay or withhold care, which would have been even worse. Similarly, the overwhelming workload pressure made the nurses feel as though they were failing in their duty of care, and unable to meet the high standards they had set for themselves. For example, Munira describes watching a patient deteriorate suddenly, and asking herself “Did I not do my job... as I was supposed to?”. Even though it was evident that the factors which increased the pressure were beyond the nurses’ control, they felt personally responsible for perceived failures.

The nurses also experienced moral distress due to a perceived failure to meet their own family obligations. The demanding

workload left nurses barely any time to spend with their families, which was particularly challenging for nurses with young children. For example, Navi describes the impact of the long working hours on her ability to care for her young children, asking “Who will take care of them?” while she works. Similarly, Angela describes the impact of the long working hours on her ability to care for her baby child, saying “... before my baby wakes up, I go for duty. After she sleeps, I come back... I cannot see her for some days... I cannot accept that, it is very difficult for me”. These situations had clearly created strong feelings of inadequacy as parents, resulting in further guilt and sadness.

The impact on family life was particularly pronounced for international nurses who had young family overseas. For example, Virat – who had a young family in his home country of India – was only able to speak to his child infrequently through video calls, due to the long working hours, the cancellation of leave, and restrictions on international travel. He was very worried about the impact this would have on his ability to form a bond with his child, bemoaning that “they have no emotional attachment with me” and that the “child cannot understand that one”. Clearly, he felt increasingly estranged from his family, and distressed by the conflict between his roles as a nurse and as a father. The identification of this form of moral distress is a unique contribution of this study, likely due to the fact that such a high proportion of nurses in Kuwait are recruited from overseas.

3.2.3. Deteriorating mental health

Overall, the nurses were significantly affected by the intense pressure in the ICU and the moral distress they experienced. As a result of these factors, they began to suffer mental distress, experiencing a range of negative symptoms. Table 3 summarises the different mental health symptoms reported in the interviews.

The nurses were afraid of the virus and felt unprepared for treating it. For example, Gabriel spoke of the “fear that we will be infected with a disease” and Shreya reported that the nurses were “scared of COVID-19”. These fears were particularly prominent in the earlier stages of the pandemic, when the severity of an infection was still largely unknown. Fear is implicated in the development of depression and anxiety disorders (Möhler, 2012), suggesting that this may have contributed to some of the other symptoms the nurses experienced.

Other mental health symptoms arose directly from moral distress. Following perceived failures in work and/or at home, the nurses experienced sadness, guilt, frustration, and helplessness. For example, Shreya spoke of how some nurses “started... crying”, and Angela described feeling “really helpless, depressed, frustrated” because of the situation. These findings accord with a previous review (Riedel et al., 2022) identifying the same symptoms (as well as isolation) as common consequences of moral distress. Left untreated, these symptoms can lead to more severe depression and post-traumatic stress disorder (British Medical Association, 2021). Again, this reiterates the long-term unsustainability of the nurses’ working practices during the pandemic.

Finally, the nurses expressed feeling overwhelmed by the intense pressure and being emotionally exhausted by their experiences. Anika said she was “so tired” by her work, and Angela described “the feeling that you cannot finish your work” as her typical experience. Munira experienced “so much pressure” by the guilt she felt about potentially making a mistake, and the conditions in the ICU similarly left Shreya feeling as though her “head is going to break”. These comments are indicative of emotional exhaustion, which is the core component of burnout (i.e., severe energy depletion and negative feelings towards one’s job) (Seidler et al., 2014). In the context of nursing, burnout among staff leads to poorer-quality and less safe care, lower organisational commitment and productivity, higher turnover intentions, and reduced patient satisfaction (Jun et al., 2021).

4. Discussion

The interviews revealed a considerable intensification of pressure in the Kuwaiti ICUs during the pandemic. The ICUs quickly became overstretched due to a rapid rise in the number of patients and a worsening problem of staff shortages. The heightened workload was exacerbated by long working hours and the cancellation of annual leave, which left the nurses feeling like their lives were entirely dominated by work. Moreover, there were concerns about inadequate and insufficient PPE, heightening worries about the risk of becoming personally infected and of passing on infections to others, particularly family members and vulnerable patients. Together, these factors contributed to a highly stressful working life, and also strained relationships in the ICU. These stressors are broadly consistent with those which have been identified in research from higher- and lower-income countries around the world, showing that these were global issues (e.g., Chemali et al., 2022; Doleman et al., 2023; Douin et al., 2021; Härgestam et al., 2023; Koontalay et al., 2021; Liao et al., 2020; Sen-Crowe et al., 2020).

As a result of these stressors, the nurses experienced a pervading sense of moral distress. They were frequently placed in situations where the ‘right’ and ‘wrong’ options were unclear, and where all available possibilities would cause harm to somebody. The nurses felt duty bound to provide the best possible care to their patients despite all of the challenges in the ICU, but were nonetheless unable to prevent care from being compromised, and also felt as though their increasing efforts at work were leading them to fail in their family lives. They recognised issues that needed to be addressed in the ICU but felt as though they had no power to instigate those changes, and had instead developed a learned helplessness response. As a result of these overall conditions and the moral distress they caused, the ICU nurses began to experience a variety of negative mental health symptoms. Again, these reports are consistent with studies from elsewhere which also revealed moral distress and impaired wellbeing among ICU nurses during the pandemic (e.g., Gormez et al., 2021; Gupta and Sahoo, 2020; Riedel et al., 2022).

While the majority of the challenges are consistent with international accounts, certain stressors were more specific to the Kuwaiti context. In particular, the finding of moral distress in relation to estrangement from family overseas can be attributed to the highly multicultural nature of the Kuwaiti nursing workforce. This issue arose in relation to the long working hours, the cancellation of leave, and the restriction of international travel, all of which made it increasingly difficult for the nurses to spend time with overseas family

either virtually or in person. Whilst native employees could at least visit their family when not on shift, the international nurses were prevented from doing so. As a result, they were unable to see or care for family members, including their young children and elderly parents. They described how this experience left them feeling isolated and lacking a sense of purpose in their work. This was a novel finding, not identified in studies from other countries, nor in the study from Kuwait by [Alsaeed et al. \(2023\)](#). This is possibly because the study by [Alsaeed et al. \(2023\)](#) interviewed physicians, a greater proportion of whom are Kuwaiti nationals (50%, in this study).

4.1. Recommendations

Our study has wide-ranging implications for future research and practice. Firstly, the findings highlight a need to better support international nurses who are geographically separated from their loved ones. Whilst international travel restrictions were an unavoidable reality of the pandemic, hospitals could do more to prevent nurses from suffering harm to their family life as a result of fulfilling their work obligations. For example, they could ensure that staff have time for proper breaks from work while on shift, and access to a quiet location to make calls to family. This would at least have ensured that the international nurses were still able to speak with family at a time that suited both parties, despite the travel restrictions and long working hours. Moreover, the cancellation of the nurses' annual leave should also have been reverted, so that the international nurses had the opportunity to travel to see family in person as soon as it became possible to do so again.

These suggestions rely upon addressing the larger issue of nursing staff shortages. The worsening of nursing shortages was a relatively global phenomenon during the pandemic ([Buchan et al., 2022](#)), so healthcare authorities across the world should consider options for making nursing careers a more attractive proposition, such as through the provision of career development opportunities, autonomy over nursing care, and sufficient time for patient care tasks ([Cowden and Cummings, 2011](#)). However, the problem was particularly pronounced in Kuwait, which has had pre-existing problems with the recruitment and retainment of nurses for more than a decade ([Atkinson, 2015](#)). Our research identifies further issues which Kuwaiti healthcare policymakers will need to consider to address this issue, such as increasing the number of nurses trained within Kuwait, while also improving conditions for international nurses by ensuring all staff are treated with respect and have sufficient free time and annual leave to maintain relationships with loved ones abroad.

Given the prevalence of moral distress and impaired wellbeing among the ICU nurses, a wider set of organisational measures to alleviate stress are also warranted. Creating less stressful working environments – by mitigating the avoidable stressors in the workplace – will also help to address the staff shortage issues. One important recommendation is to increase hospital inventories of PPE and strengthen government capacity to maintain and distribute stockpiles of PPE, as suggested by [Cohen and Rodgers \(2020\)](#). It may also be valuable to improve procedures around safely disinfecting and re-using PPE, as suggested by [Rowan and Laffey \(2020\)](#). Moreover, it will also be valuable for hospitals to develop new pandemic action plans which are directly grounded in nurses' actual experiences, so that any issues with unrealistic infection control procedures and working expectations (as this study identified) can be immediately identified and resolved. Indeed, directly involving nurses in this process has been highlighted as an important strategy both for improving hospital preparedness and supporting nurse wellbeing ([Marair and Slater, 2023](#)). This would also help to address the identified issue of learned helplessness, because it would show the nurses that their voices are being listened to and that they actually do have a mechanism for instigating positive change in the organisation.

Avoidable stress was also caused by confrontational communication strategies within the ICU. The nurses were often shouted at by senior doctors, creating a sense of fear and making the nurses less comfortable in speaking openly about the patients' conditions. To address this, senior leadership should better educate doctors on interpersonal skills. For example, they could host sessions with the doctors to help them to understand the different challenges that the ICU nurses face, and encourage them to adopt less confrontational communication strategies. Improving interpersonal relationships would not only reduce stress for the nurses, but also help to implement more open communication, which is more conducive to effective patient care in the ICU.

Finally, given the clear mental health impact observed in our data, it is also important to ensure that adequate mental health support is in place within the hospital. For example, it has been demonstrated elsewhere that individual- or group-based cognitive therapy ([Ottisova et al., 2022](#)) and mindfulness sessions ([Al Ozairi et al., 2023](#)) are effective ways of supporting healthcare workers in crisis situations. There is also a role for mental health literacy, ensuring that healthcare workers are able to recognise the signs and symptoms of clinical depression and anxiety, so that they know when to seek professional support ([David et al., 2022](#)). Importantly, the hospital's provision of mental health support should not be a temporary measure in response to the pandemic, but rather an ongoing offering embedded within the hospital's operation in the long term ([Marshall, 1996](#)).

4.2. Limitations

Several limitations of our study should be acknowledged. Firstly, the inability to conduct face-to-face interviews may have affected the richness of the data. The interviewer learned a series of online interviewing skills to mitigate the impact of conducting the interviews remotely, including technical and interpersonal skills. Nonetheless, it is thought that videoconferencing interviews cannot replicate the quality of in-person interviews ([Johnson et al., 2021](#)), which enhance rapport-building by facilitating more natural conversation and better identification of non-verbal cues.

Next, restricting the interviews to ICU nurses limits the range of perspectives represented in the data, potentially resulting in less comprehensive data. Restricting the interviews to nurses was an intentional decision, as practical constraints necessitated placing limits on data collection. However, it is possible that considering a wider range of perspectives (e.g., patients, doctors, families) may have revealed other important challenges which the nurses were unaware of.

Additionally, it is regrettable that we were unable to attain data on patient demographics nor case mix at each of the hospitals. This would have provided useful additional context for readers, providing a richer understanding of the context in the ICU and the types of patient that the nurses provided care for. We recommend that this information is collected from the onset in future studies, so that it can be reported.

Finally, there is the possibility of sampling bias. We relied on volunteers for the interviews, and those who volunteered may have had reasons for doing so which differentiated them from other nurses – for example, those who volunteered may have been those who were most affected by the pandemic, and wanted an opportunity to air their concerns. However, it is recognised that a representative sample is unnecessary in qualitative research (Marshall, 1996), so this is not considered a major limitation.

5. Conclusion

The study revealed a considerable intensification of pressure in ICUs in Kuwait during the pandemic, reflecting the rapid influx in patients, staff shortage issues, and the resultant increase in workload for the nurses. These working conditions caused various ethical challenges for the nurses, who wondered how best to fulfil their duty to care for all of their patients whilst also preserving their own health and taking care of their family. For the international nurses in particular, the pandemic had the devastating toll of enforcing a separation from their family overseas, resulting in estrangement and a lost sense of purpose at work. Ultimately, the nurses experienced moral distress, impaired well-being, and exhaustion as a result of these conditions. Greater support and resources should therefore be provided for ICU nurses, in recognition of the psychological toll of working in high-stress environments.

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Declaration of competing interest

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