

Challenges faced by new nurses during the COVID-19 pandemic

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Abstract

Introduction: COVID-19 can be considered a unique and complex form of trauma with potentially devastating consequences for nurses in general and new nurses specifically. Few studies have been published that explain how relatively new nurses were prepared for COVID-19 in terms of knowledge and skill and how these nurses fared physically and emotionally.

Design: A qualitative descriptive design utilizing purposive sampling to recruit a diverse group of nurses who were within 2 years post-graduation from nursing school.

Methods: In-depth interviews of 29 nurses were conducted using a semi-structured interview guide to elicit data, which was coded and analyzed using thematic analysis.

Results: Six main themes and multiple subthemes were identified in the data. The main themes were: "We were not prepared," "I was just thrown in," "Avoiding infection," "It was so sad," "We did the best we could," and "I learned so much."

Conclusion: The nurses who participated in this study expressed fear, weariness, exhaustion, isolation, and distress, observations echoed by studies from other countries. Retention of new nurses in acute care settings has always been a concern. In the recent Current Population Survey, a 4% reduction in nurses under 35 years of age has been reported, imperiling the retention of an effective workforce for decades to come.

Clinical Relevance: A recent report suggests that a larger than expected number of young nurses have left the profession in the wake of the pandemic. Staff shortages threaten the ability of the remaining nurses to do their jobs. This is the time to listen to the needs of new nurses to retain them in the profession and to avoid an even greater shortage in the near future.

KEYWORDS

acute care hospitals, COVID-19, nurses, pandemic

INTRODUCTION

In January 2021, the International Council of Nurses (ICN) presented the findings of a survey of more than 130 National Nurses' Associations, which found that COVID-19 is a unique and complex

form of trauma with potentially devastating consequences for nurses and health systems. They went on to suggest that nursing may face an exodus from the profession leading to severe shortages worldwide. The recent findings from the Current Population Survey does indeed reflect a loss of 100,000 nurses in 1 year in the United

States (US), with a 4% drop in the number of nurses under the age of 35 (Buerhaus et al., 2022).

Many of the early studies of nurses and COVID-19 came from China as that country had the first large scale outbreak of the virus. Sun et al. (2021) interviewed 20 nurses in China, who were among the first in the world to provide care for patients diagnosed with COVID-19, and they found that caring for COVID-19 patients required more knowledge and expertise than the nurses had at that time. Nurses who were new to the infectious disease unit were given a week of training which included working with other infectious disease patients (non-COVID patients) in the unit and negative pressure ward training. Within a short period of time, the nurses' workloads increased by one and a half to two times the normal work hours and patient assignments. Nurses were required to reuse personal protective equipment (PPE) and expressed fear and anxiety, specifically in relation to the safety of their families. The nurses in their study experienced physical exhaustion, psychological helplessness, and concern related to a possible health threat, in addition to a lack of knowledge of how to care for these very sick patients. Liu, Luo, et al. (2020), in a qualitative study of nurses and physicians in Hubei, China found similar findings, however, they also described supports provided by hospital administrators such as living accommodations, transportation to and from work, food, medications as needed, and subsidies. In addition to the early studies from China, there were some studies from other countries that focused on nurses' concerns about COVID-19, fears, and intent to leave the profession. Halcomb et al. (2020) surveyed 637 primary care nurses who provided care in community settings in Australia. Although a third of the nurses had no experience in infectious disease, most of the respondents felt their knowledge was sufficient to care for COVID-19 patients, however, many nurses described a lack of PPE in the workplace. Fifty-four percent of the respondents felt well supported by their employer and 34% expressed the concern that care provided in their workplace was significantly or slightly worse than it had been before the advent of COVID-19. One hundred and forty (22%) of the nurses reported that they had considered quitting their jobs. Nurses in Iran and Indonesia working with COVID-19 patients, expressed similar fears and concerns, including a shortage of PPE, and fear of the virus (Aditya et al., 2021; Moradi et al., 2021). The Indonesian nurses also expressed concern for their families who may be stigmatized themselves by the nurses' exposure to COVID-19 patients (Aditya et al., 2021).

In the US, few studies to date have presented the voices of nurses who worked and lived through the initial COVID-19 surge which started in March 2020. Many of the stories made available to the lay public were anecdotal reports of the nursing workload, the fear of infection, and the primarily very supportive role of the public (sending food to the hospital units and clapping at 7 p.m. when nurses were changing shifts in New York City). However, little is known as to how nurses in the US, specifically new nurses, were prepared for COVID-19 in terms of knowledge and skill and how these new nurses fared physically, emotionally, and mentally

during the pandemic challenge that, 2 years later, has still not ended.

Kramer (1974) coined the term "reality shock" to define the role transition from nursing student to working nurse as a time of stress, fear, and confronting the unknown. Prior to COVID-19, studies found new nurses to be overwhelmed by the need to take on a role for which they might not have felt prepared. Duchscher (2009) described the immediate period post-orientation as exhausting and isolating. It is not yet known if entering the profession during a worldwide pandemic will increase these negative perceptions and experiences, or how they will influence new nurses' willingness to remain at the bedside.

During the pandemic, little attention has been paid to new nurses (defined as those nurses with less than 2 years of clinical experience) who had just recently entered the workplace. Although their education had not been impacted by a worldwide pandemic, it was not known if the standard nursing curriculum had provided these new nurses with an adequate foundation with which to adjust to the challenges and pressures of a widely infectious and often fatal newly discovered infectious disease. As the pressures of COVID-19 intensified in 2020 through 2021, anecdotal reports of nurses quitting the intensive care unit (ICU), leaving the bedside, or quitting the profession completely became the reading material for the worried well, who feared not having an experienced nurse at their bedside if they became ill. The rate of these news articles increased monthly, with the US Surgeon General tweeting his concern in September of 2021: "Nurses - and all frontline clinicians - deserve our gratitude. But that alone isn't enough. We need to extend tangible support, including resources to help them heal", (Murthy, 2021).

The purpose of this study was to determine how well new nurses were handling the challenges of the COVID-19 pandemic in the hospital setting. The findings from this study could help both nursing faculty and workplace educators consider what knowledge and skills need to be enhanced for new nurses to be able to manage the workload of clinical challenges, including potential future pandemics, and constantly changing evidence due to rapidly developing science that are more than likely to impact their nursing careers.

MATERIALS AND METHODS

Design

A qualitative descriptive design was utilized for this study. Kim et al. (2017) describe qualitative descriptive studies as appropriate for understanding the who, what, and where of events or experiences. As the COVID-19 pandemic was a novel experience for nurses, the need to grasp the who, what, and where, or the basic story of the pandemic was a necessary first step in understanding such an event.

Sampling

Eligibility criteria for participants in this study included those nurses who had graduated from a nursing program in 2019 and who were working in an acute care setting. Nurses with a maximum of 2 years of acute care experience as a registered nurse, were considered new nurses for this study. The initial recruitment effort was focused on the 2019 graduates from both a traditional undergraduate and accelerated second-degree Bachelor of Science program at a state university in the northeast US. Emails sent to these alumni resulted in 11 responses that did not elicit saturation of data. To increase enrollment, recruitment was opened to nurses who had graduated from local Associate Degree programs in 2019. The researchers also worked with a clinical educator from a local academic medical center to contact nurses who met eligibility criteria. Snowball sampling was utilized as well.

Data collection

A semi-structured interview guide was developed based on the researchers' experiences as nursing educators and articles and essays that were regularly printed in lay publications, scholarly journals, or presented on television news reports about the COVID-19 crisis. All three researchers alternated participation in telephone interviews (with two researchers in each interview) which lasted from 30 to 75 min. The telephone interviews began in early March 2021 and were completed when data saturation was reached at the end of May 2021. Prior to the interviews, participants were asked to complete an online consent form and an online demographic survey. Participants received a \$25 gift card following their interviews. Data collection continued until each of the researchers determined individually that coding of additional data would no longer provide significant themes (Saunders et al., 2018). This study was approved by the Institutional Review Board of Rutgers University.

Interviews began with a broad open ended question, "Tell us what it has been like to care for COVID-19 patients in the hospital setting?" to allow participants to freely share their experiences while providing the researchers with a broad explanation of what the nurses considered the most important, or most troubling of their perceptions. This was followed by probing questions that elaborated on the participants' experiences and preparation in the workplace to care for COVID-19 patients, including the skills required to provide care, and to effectively communicate with patients, their families, and physicians. Additional probing questions were added to the interviews based on areas of concern expressed by previous participants such as fear of infection.

ANALYSIS

The interviews were audiotaped with the participants' permission and transcribed verbatim. Inductive thematic analysis was utilized

for data analysis (Braun & Clarke, 2006) to provide a rich and detailed, yet complex account of the qualitative data. This methodology was chosen as it allows researchers to describe a participant's unique perspective (working with COVID-19 patients) while allowing an analysis of similarities and differences among participants.

The researchers debriefed after the interviews, listened to the audio, and reviewed the transcripts individually to determine possible themes. To contribute to the trustworthiness of the qualitative data analysis, investigator triangulation was accomplished by using several analysts (S.L., P.D.S., and B.J.D.) to increase the credibility of the findings (Polit & Beck, 2018, p. 300). Interviews were transcribed by members of the research team and reviewed for accuracy. Each of the researchers independently coded the transcripts. Patterns were recognized, and initial codes were recoded and collapsed with categories of greater abstraction emerging (Wuest, 2012). Then the results of the early coding process were shared electronically through shared documents. The codes were then reviewed and discussed by all the researchers. Discrepancies were resolved by consensus and refinement of the themes continued until all analyst input was considered and agreement on the themes was made. Demographic data were analyzed with descriptive statistics using Stata version 14. Attention was paid to the Standards for Reporting Qualitative Research checklist as a means of ensuring rigor in the conduct and the reporting of this study (O'Brien et al., 2014).

RESULTS

Twenty-nine nurses participated in the interview process, with an average age of 27.6 years. Four of the participants identified as male, 17 reported being White, four reported being Black, three were Latino (all male), four identified as Asian, and one reported other as their race. See Table 1 for additional demographics. Six main themes and multiple subthemes were identified in the data. The main themes in the participants' own words were: "We were not prepared," "I was just thrown in," "Avoiding infection," "It was so sad," "We did the best we could," and "I learned so much."

We were not prepared

Subtheme: Do we have enough PPE?

Almost every participant's initial answer to the broad question, "tell us what it has been like to care for COVID-19 patients in the hospital setting?" concerned whether their workplace had provided adequate PPE as the first COVID patients were admitted, thus making "Do we have enough PPE?" an important subtheme. As in the media accounts of treating COVID-19 patients, nurses focused on PPE as the most important preparation a hospital could provide for their safety and to prevent the spread of COVID-19 from infected patients to non-infected patients in the hospital. These new nurses had not been prepared for the possibility that

TABLE 1 Demographics of sample (n = 29)

Variable	N	%
Gender		
Female	25	86.20
Male	4	13.80
Race/Ethnicity		
White	17	58.62
Black or African American	4	13.80
Asian	4	13.80
Latino	3	10.34
Other	1	3.44
Marital status		
Single	22	75.86
Married	7	24.14
Has children		
Yes	3	10.34
No	26	89.65
Born in the US		
Yes	27	93.10
No	2	6.90

their safety needs might not be met in the workplace. Comments ranged from annoyance to confusion to fear. Several nurses explained that they were never actually fitted for an N95. Most respondents stated that they were forced to reuse their masks in the initial outbreak of the pandemic.

Participant 15: "But in reality, like these patients were very, very sick. And then on top of that, we have like, you know, that was the period of like, reusing PPE reusing everything."

Participant 23: "PPE ran out within a week".

Participant 25: "...The gown thing was an issue because the first day they told us to stop using gowns...you're using too many gowns."

Subtheme: The rules keep changing

New nurses usually understand that they may not know how to care for all types of patients but can always depend on more experienced staff to guide them. However, with COVID-19, the rules kept changing, thus there was often no one with experience to rely upon. Participants discussed receiving mixed or even conflicting information from hospital administrators in addition to almost daily updates from the Centers for Disease Control and Prevention (CDC) delivered in daily huddles or via hospital email. Participant 1, who worked in a children's hospital, found this communication helpful and a source of support. She discussed the support she felt from her organization's daily town hall meetings where all questions were answered stating "...that was really supportive because kind of like every day you would get updates as to what was new, everything

was changing so quickly." Other nurses expressed dismay at the constant changes in policy and procedure. For example, Participant 6 stating "And they can't say like what protocol is right? Because the world is still trying to figure that out."

I was just thrown in

Subtheme: Still on/just off orientation

Many of the participants mentioned orientation, having just come off or still being on orientation when the first COVID-19 patients entered the hospital. Two emergency department nurses described their orientation differently. Participant 4 explained that she was kept away from COVID patients initially and was not allowed to observe or participate in an intubation, while Participant 7 stated: "...I'm in the emergency department ... pretty quickly after graduation, I was... handling full assignments and taking care of ICU patients."

It was difficult for the new nurses to care for a range of patients during the initial months of the pandemic due to the growing number of COVID patients. Therefore, they did not learn the range of skills they would have traditionally learned when managing care for people with other diagnoses.

Participant 22: "The orientation was really hard for me. I wasn't learning anything. After my orientation was done ... I really had to learn everything on my own. And just the intubations. I wasn't really familiar with them. I needed to be back (in orientation)."

Subtheme: Changes at work

New nurses tend to be task oriented, and it takes some time for them to feel comfortable in their new roles. If the tasks keep changing, comfort and confidence are not achieved. The one constant for these participants was change. Change in the patients they were caring for, change in the work of their units, or the units to which they were assigned. Most of the participants described change in how they provided care which required that they learn new techniques like proning patients, or had to understand that their previous knowledge, about oxygen saturation for example, was no longer true, as patients were no longer being intubated as soon as their saturation level declined. One nurse, Participant 15, had been hired to work with pediatric patients. She described her experience thusly:

...when I graduated nursing school (I) started on a pediatric intensive care. March when you know, everything started up last year... we were actually told that we have to take care of adult COVID patients.... we did have these adult patients, but the peds patients were still there.

This nurse went on to explain that when the unit began to receive adult COVID patients, the pediatricians began taking care of critically ill adult COVID patients. She stated:

“Our doctors were also scared because they were used to taking care of pediatric patients. Really, like those patients are sicker than most kids that I have taken care of.”

The nurses described the fear of taking care of their first COVID-19 patient which eventually gave way to a resignation that all their patients were COVID-19 patients.

Participant 7: “There’s a constant level of anxiety and what’s coming through the doors. Am I prepared to deal with these things?”

Participant 20: “So I will say that it has changed dramatically from the start of it ... when you would come in there was almost like an air of fear. Like you could cut it with a knife, everyone was terrified. It was always a fear of like, is my floor going to be next?”

Avoiding infection

Subtheme: Patients at risk/nurses at risk

Nurses described various challenges related to the risk of infection, in either themselves, but more often in other, non-COVID patients. While all admissions were screened on admission, some who initially tested negative became positive during their hospitalization for other diagnoses. Sometimes it was not clear how this happened. But occasionally a patient with pending COVID-19 results was placed in a room with a non-COVID patient.

Participant 11: “You’ve already given them a roommate, or you know, you have to tell the roommate, like, I’m so sorry, but we tested your roommate, and they came back positive for COVID, sometimes they’re mad... it’s like, how could this happen?”

Several nurses described events in which they rushed into a patient’s room to handle an emergency without taking the time to fully don their PPE.

Participant 20: “Literally last night, I had a patient brady down, his heart rate was in the teens. And I’m running into the room and ... putting my gown on and trying to get the gloves inside of the room.”

One nurse, who had previously been a firefighter and an EMT had a different way of looking at protecting herself that she learned before she became a nurse.

Participant 19: “There’s definitely times when there was like an emergency that somebody would pop off the vent, then you feel like you need to run into the room right away, like even if you’re

either not wearing a gown... but because like my fire and EMS experiences, if I hurt myself, I can’t help other people.”

Subtheme: Risking your family's health

A number of the respondents lived with their parents or other possibly at-risk family members and described their fear of bringing COVID-19 home with them. They each described a method of changing their clothes before they entered the house. Participant 23 described her concern for her parents’ health: “I remember coming home, I still lived with my parents. And I would just come home from work and just go directly ...to the shower, and then just hide in my room for like months.”

Participant 8 described her feelings about living alone and seeing her parents: “I did see them for a little bit, but when I did that they were the only people I saw because otherwise it would have just been me and my cat and I think I would have went stir crazy.”

It was so sad

Subtheme: How can I explain

In the best of circumstances, it can be difficult to help a family accept the fact that their loved one is dying. As new nurses, these participants had little if any experience with severely ill or dying patients and did not recall learning how to handle such communication. This lack of experience was made much more difficult in at least two ways: no visitation rules and all the information coming from social and mainstream media. Families may have seen videos of ICUs swamped with COVID-19 patients, but they did not see their relative in such a situation and so had difficulty understanding their condition.

Participant 19: “But when I was facetimeing families and the patient’s been there for maybe 25 days, still intubated, and not responding. I would show them these are the different machines that they’re on. This is the ventilator. Because sometimes they would be like, I don’t want to see it. They would be upset... this is real life.”

Subtheme: So much death

For new nurses who had not learned much about death and dying in school, and then were suddenly facing frequent deaths in the hospital, they had to confront their own fears as well as try to educate and comfort families on the telephone or through Facetime devices. Prior to the pandemic, deaths in the hospital were not commonplace events outside of the ICU or Emergency Department. During the pandemic,

critically ill COVID-19 patients further increased the mortality rates in these high acuity areas. Participants who worked in the ICU discussed caring for these patients for extended periods of time, even as the patients were no longer likely to survive their hospitalization.

Participant 17: "I would just say... it's been sad. I feel like in my first year, I have seen so many people die. Talking to their families has also been - the worst experience thus far."

Participant 19: "Yeah, so a lot of our COVID patients were sedated, paralyzed. And you're always like, you know, pinching their nails beds and, like sternal, rubbing them to try to see if they're gonna wake up. Every time you put the suction catheter down their ET tube, and they're coughing and uncomfortable. And we've seen people intubated for like a month and a half before a family makes a decision."

We did the best we could

Subtheme: Working so hard

Nurses who began their careers during COVID-19 lacked the experience to understand that the hectic workload was not the norm for most hospital units. One nurse worked in a small psychiatric hospital in which management had not planned for possible COVID-19 diagnoses. She (Participant 25) stated "In order for admission, patients had to be afebrile. And one day, we were testing a patient for COVID for housing, and we realized (he) was positive. So we kind of had to create a unit."

She described her fear upon realizing her role on the new unit: "I've never really been the sole charge nurse before.... And the next morning, I saw the isolation unit was open, and I was the nurse [assigned] over there...I actually cried when I saw." She went on to explain that the psychiatrists would not enter the isolation unit and so patients were talking to their physicians over the one cell phone that the nurse would bring into the room. Otherwise, these psychiatric patients were left alone in their rooms without active treatment.

Subtheme: Nurses do everything

While many of the nurses turned to their co-workers for support, guidance, and assistance in handling seriously ill patients, others described situations in which the nurses were the only hospital staff who would willingly enter a patient's room. Emotions related to this ranged from annoyance in response to housekeepers who would not empty garbage cans, to fear and concern when these new nurses found that doctors were asking their opinions about patient conditions. Participant 12 quite elegantly described the expanded workload she was facing:

"That was the one that we had on an isolated unit. It was just one nurse, and then one tech, but the tech

wouldn't go in unless it's really necessary. It was usually just the nurse going in. Same for (housekeeping) staff. So the nurse was basically playing the role of all the different disciplines. So we were taking the trash out, we were doing...also tech work instead of delegating it. (Concerning the doctors) but if a patient was stable and they didn't need to go in, they would not go in there. It was a lot of responsibility on the nurses."

I learned so much

Subtheme: Like a crash course

Respondents talked about all the new skills they needed to learn and how their understanding of metrics such as oxygen saturation changed during the pandemic. One nurse described the fear she felt caring for COVID-19 patients on a medical unit, because she did not have access to the monitors and so could not know when the patient began to deteriorate. Another respondent explained that she was afraid to think of all she did not have time to learn because she only had COVID-19 patients on her unit, and so was not exposed to patients with cancer or cardiac or other conditions.

Participant 13: "I feel like you kind of gotta like, learn fast. You got to pick up the pace. Because you never like I say, you never know what's gonna happen with a patient."

Subtheme: We became a team

A positive outcome expressed by many of the participants was the feeling that the nurses on their unit learned to really work together as a team, to provide support for each other both in work and at home, and to check on each other to be sure that their co-workers were physically and emotionally fine.

Participant 12: "What did help me cope, I want to say my coworkers...it was good to have a nice team of coworkers that understood it, because I don't think a lot of people did understand it from the outside world."

Participant 20: "It made us closer... my coworkers were amazing on my old floor to begin with. But it was always nice. Not even just working as a team that we would have. We would almost have debriefings with each other." See [Table 2](#) for additional quotes.

DISCUSSION

This qualitative study focused on the experiences that new nurses working in acute care settings experienced during the COVID-19

TABLE 2 Themes, subthemes and quotes

Themes	Subthemes	Quotes
We were not prepared	Do we have enough PPE?	<p>Participant 2: (we had to) use that one N95 for the whole shift. And then at the end of the shift ...you put it in like a container. I do not know what they did with them, I do not know what they did not do with them. Like the following shift, you are coming back, you are going you reuse those N95s. They said they put them through the light or something.</p> <p>Participant 7: It's definitely scary because being in the emergency department where people are walking in and you see somebody who does not have any COVID symptoms that are reported that day, and then they say, Oh, well, massive vomiting is now a new symptom. So people that you'll go in and assess, and you will not have that PPE on. And then the doctor will go in and evaluate them and say, oh, we are testing them for COVID. That's something that's scary.</p> <p>Participant 8: I remember one of my coworkers looked up a video that circulated through (the hospital) and sent it throughout like our night shift staff that we could see how to properly don and doff. That wasn't that wasn't done through our you know, our higher up. I feel that hospitals, at least (my hospital) they were more so concerned about like appearances and everything.</p> <p>Participant 10: We all kind of like had like mini panic attacks as we were like gowning up and going into the room, because you do not we did not know. At first if they were positive patients until you know, at that time days later, when their tests would come back.</p> <p>Participant 14: And it wasn't too bad compared to some other places where I've seen them, you know, wearing trash bags as gowns.</p> <p>Participant 21: What was the point of getting vaccinated if I still have to wear eye protection? I've got to just protect myself, not protecting other people. Then I'm gonna get it through my eyeballs? So you are saying, that's insane. Like, I'm not getting it through my eyes, even though vaccinated with two masks on, it's not gonna happen. And like, it's like a maybe less than 1% chance that that happens. More of a chance getting hit by a car.</p> <p>Participant 23: Knowing how to like put your gloves and your mask and, and all that stuff. But to be honest, that did not really help because PPE ran out within a week.</p>
	The rules kept changing	<p>Participant 1: Once we did start testing, it was more just if you were coming in for a procedure. Because those rules have changed over the whole time, those rules are still changing.</p> <p>Participant 2: Today, you know you cannot, the rules are once you have a COVID patient, you cannot cross over to the clean patients right? They'll say, Oh well, you know, with staffing you are going to have a COVID patient, and you are going to cross over the wall to have a clean patient. And it's so funny, because like that same exact day that they made that they made it, they made it known during huddle.</p> <p>Participant 3: The CDC kept changing its protocol in the beginning. Initially, we all had masks, and for the most part felt Okay. And then after some time, they are like, No you should really have an N95 if you are dealing with one of these patients. So I went to lunch break that day and came back and they are like, Wear your N95. Here's a face shield, like, we are going all out.</p> <p>Participant 5: The first time there really wasn't much preparation, we were just kind of thrown into it, you know, we were told how to use the proper PPE. I remember the first time around at X hospital, they told us that we only had to wear and N95 with the patients were all high flow, wear your surgical mask, your gown and gloves, and stay in the room the least amount of time as you possibly could.</p> <p>Participant 6: And they cannot say like, what protocol is right? Because the world is still trying to figure that out.</p> <p>Participant 7: So instead of it just being you know, as newer nurses being overwhelmed, and not really knowing what to do, it was insane, because no one really knew what to do. And the policies were changing every day it was really hard to keep up. But I feel like I've kind of set up with an advantage where I was still really malleable in what I learned, and my ability to take in that information, whereas some of the nurses that have been around for a while really struggled, because they are so used to the way that things are always done.</p> <p>Participant 8: So it's kind of something that always keeps you on your toes, like it's very nerve racking. Now that we kind of have more of a set course of care for them. A little less haphazard, but when everything first started, it was throwing crap at the wall and seeing what stuck like it was chaos, it was crazy. And I was only seven months into my nursing career. So it was like, kind of like, sink or swim.</p> <p>Participant 10: every day, like, we were talking to our ID doctors and like, what, why aren't we using this? Or why aren't we using this? It's really just kind of like throwing darts, they try to figure out what is working, what's not working. So it's not like when you are dealing with, you know, hypertensive patients, well, you give these medications, because this is what happens.</p> <p>Participant 12: It has been a roller coaster, to say the least, I want to say at the very beginning it was quite confusing, simply because there were so many changes in policy day after day, you come in one day, there's something going on, you come in the next day, there's different requirements. So for me that, that at the beginning was a challenge. After that, I think we did a pretty good job.</p> <p>Participant 22: So that was really hard, because the rules were just changing every day. It was very, I was very annoyed that the rules are always changing, because I always knew I did not want to get in trouble. So I was always trying to make sure I was doing everything correctly. It was a really hard transition, especially because I wasn't used to wearing all that PPE all the time. I hated it.</p> <p>Participant 23: Yes, so we would have group huddles every morning. And then at the end of our shift, to see how the day went, how many COVID patients were in how many expired. And then the new CDC guidelines that were updating every sometimes it seemed like every hour.</p>

(Continues)

TABLE 2 (Continued)

Themes	Subthemes	Quotes
I was just thrown in	Still on/just off orientation	<p>Participant 2: Like first code was my first week, and it was my first it was with my preceptor at the time.</p> <p>Participant 4: And while I was on orientation, they usually kept me on the clean side. And then slowly they introduced me to the COVID side and then within, within a few months, actually, it was all just one ED.</p> <p>Participant 5: I specifically remember the first night I was slated to a COVID floor and I remember crying. I was so scared. I was like, I think maybe two months off orientation. I was very scared.</p> <p>Participant 10: I am a brand new nurse and I started my career out in the ICU. And my orientation started in October of 2019. So I was kind of getting exposures to the, I guess, run of the mill, you know, ICU typical patients. And then, because I was a brand new nurse, my orientation lasted six months, which puts us into February, which was right when it started. So that's been my career, most of my nursing career. So it's, I feel it's been, it's been a wonderful experience, it's been a horrible experience.</p> <p>Participant 13: it's been a little stressful, especially as a new nurse, just kind of like, kind of learning, like the normal stuff plus, like, just kind of being ready for your patients to kind of just like, their O2 sat just to go down at any point, you got to be ready to expect it. Also, like with the heart rates and stuff, like every thing's kind of just starting to shut down. So you always got to, like, watch for like, early signs of changes in like their mental status, or heart rate, blood pressure, all that. But it's been very stressful. Yeah, I'm still into my orientation. But I feel like they do not really like tell you kind of what the patient's statuses are going to be like and what it can look like, as they like start to deteriorate or get better even like they kind of just like, you kind of just get thrown into it.</p> <p>Participant 19: I got off orientation in February of 2020. So I was started out on night shift. And luckily, I did not have any COVID patients for the first like month. And then I started on getting pulled to another unit that did have COVID. And it was a little stressful because my first night getting pulled, I was also like, on a COVID unit. And I did not know how to be safe. We did not really know how you know just how to care for the patients? I did not know like, where everything was, so it was a really, really tough shift.</p> <p>Participant 21: I was on orientation for most of COVID. It was. So I was actually like, able to extend my orientation, because during COVID, we are only we were not seeing the regulars. We were not seeing people coming in for abdominal pain, for toe pain. Even for chest pain, like people were not coming out unless they absolutely needed to.</p> <p>Participant 26: At that time since I was on an orientation so my preceptor would take and he would take the fresh heart but but since I'm new I would not take a fresh heart right away. So I would get COVID patients because I was on orientation.</p>
	Changes at work	<p>Participant 10: I feel like at one point, it only lasted so long when you kind of walked in for your shift and you look at the assignment board, and you are like, Oh, please tell me I'm not in a COVID pod. Please tell me I'm not in the COVID pod. And then it seemed like within like a week or two, it's you just walked in and that's just what we were.</p> <p>Participant 17: So in the beginning, I have been working in the ICU step down when I first started as a nurse, and then they moved us a lot of us over to the ICU, just to offer extra sets of hands. But I always wanted to work in the ICU. So we did team nursing in the ICU, because you had ICU nurses at the time with one to four patients. So you had step down nurses and that sort of nurses, we were just like, helping, like we were passing meds and doing like things within our scope of practice.</p> <p>Participant 18: So what they ended up doing since they stopped like all of the procedural the elective procedures, they actually combined our floor with the surgical floor and made the surgical floor, another ICU. So since we did not have many cardiac patients, they would either tell us we have to take PTO either paid or unpaid, or get floated to the ICU.</p> <p>Participant 12: I was on medical surgical unit. So initially, our first patient that came in was COVID, positive and she was a med surg Covid positive patient, we then took her to our COVID unit. So our whole unit basically was switched into a COVID unit.</p> <p>Initially we had a choice, but eventually, we basically had to merge two different units. And what they did was everyone who was exempt from working there, meaning immunocompromised staff, meaning pregnant staff, they were just working on non COVID units, whereas everyone else was rotating throughout the COVID unit.</p> <p>Participant 13: I got hired for the neuro ICU. But currently, the neuro ICU is an open because there are so many COVID patients, that it's kind of just like all the COVID patients in this unit.</p> <p>Participant 25: In order for admission, patients had to be afebrile. And one day, we were testing a patient for COVID for housing, and we realized was positive. And we had to kind of decide what to do. We do not have any isolation rooms. So we kind of had to create a unit.</p> <p>Participant 27: So in one night, it just like the floor drastically changed to COVID patients. So it was a huge shock. Yeah, so I just realized that when that has happened, I realized how so much can change in just one blink of an eye. And literally, like less than 24 hours.</p>

TABLE 2 (Continued)

Themes	Subthemes	Quotes
We did the best we could	Working so hard	<p>Participant 1: I guess it's kind of like, way, way way in the back of your mind like that. You're like you are a nurse, so like you are close. You might have to run into situations where you'd have to think between you and your patient and like what are you going to do? You might have to risk your life to save others so I think a thought but I do not think I ever like really thought about it.</p> <p>Participant 4: Because it was chaos, and honestly, I do not really blame management looking back at it, because it's just like, what would they have done? They could not have predicted, you know, what the next day or the next month would have looked like? They were offering a lot of COVID bonuses, for people for nurses to come in and work with the COVID patients. And there really wasn't a choice. Like, do you want to work with COVID patients? Or do you not want to work with COVID patients? If you were a healthy individual? We were not given a choice. However, if you were pregnant, or you had a lot of co-morbidities, I know that they made accommodations for nurses.</p> <p>Participant 8: we filed like, two complaints with OSHA. I do not know if anything ever became with them.</p> <p>Participant 10: I still do not think anybody understands. And I still I think what we try the best that we do. I think sometimes when we start things were a little too late. And then we can play that catch up game. I do not know if this was a state thing or whatnot. But they limited our time of trying to be in a room, which also was tough, because it's like, Okay, well, I'm not supposed to be here for more than like X amount of time I but I have to care for you and turn you and do my whole assessment. And then, you know, do everything because I'm not supposed to come in here for another few hours if I do not, absolutely have to.</p> <p>Participant 11: I feel like now at this point, like it's been, like almost a year. So it feels like all I know, is COVID patients. I said this the other day, like? Like I was joking, but I was like, I kind of forget what a normal Pulse ox is, like, if I have someone whose Pulse ox is 88. Like, I'm thrilled. I'm like, Oh, that's amazing.</p> <p>Participant 12: Oh, yeah, a lot of people quit. And a lot of people quit, I want to say a little bit after so not in the heart of like COVID time, but when it first happened March, April, it kind of quit a little bit towards the end of the summer a little bit more and by and by a few I'm you know, good seven, eight people. They either went to different facilities, or they went to where they just did not want to be a nurse anymore, and they got into a different field or they just wanted a break.</p> <p>Participant 13: ...it was unsafe patient ratios. Like, I tried to talk to my director and like management a couple times about it. And they like promised that things would get better, and things never got better. So I was, I was just gonna take precautions for me and my license. And I was just like, I'm done.</p> <p>Just like with PPE like sometimes I feel like if your patient needs something really fast, like if their oxygen levels are like dropping or like they are starting to choke or something, I feel like you kind of like, drop putting the PPE on because like, hurry up and go save your patients. So like, you are kinda like risking yourself.</p> <p>Participant 15: Honestly, a lot of people did not quit because they wanted to stop COVID they they changed to travel nursing, because the pay is just so much better than staying at our hospital, which is unfortunate. But I think everyone's considered it at some point that you are getting paid \$5000 a week to do almost the same job. Why would not you do it?</p> <p>Participant 21: We've had 90 people in our emergency room and 20 in the waiting room for the past two weeks. we have held psych patients for a week. And that's with no belongings, they are in blue scrubs, they do not get a shower. It's, it's honestly probably making them worse, because they do not want to kill themselves before they probably gotta know when we take everything away from them to treat them. Like, like animals. I feel bad. They cannot even have a fork, they can have a spoon. It's terrible. But like, you know, it's like, how do we fix it? 18 nurses walked out of our department.</p> <p>Participant 22: A lot of people just quit. It was near, like, at the same time people were just, it was like a mass exodus. I think at one point like eight nurses quit in like one week</p>
	Staff nurses do everything	<p>Participant 20: She was very upset thinking that we were giving her the admission because she was the pool nurse she was like on her when it was really just her turn to get the admission regardless of what it was. So she was at lunch when we found out so we were waiting for this patient waiting for her to come back to let her know she kept her phone. So she came up as the patient was rolling up and she was screaming, refusing the patient on the phone with our clinical directors. So at that point, like the patient heard her saw her like, she was terrified. She's screaming like what are what is my next step in refusing this patient or not taking care of a COVID patient and you could just see how scared he was. So I ended up at that point I gownned up and went into the room. I was like, Hi my name is XXX I'm gonna be your nurse tonight. And two other nurses on the floor came in with me. And at that point, it was just like our patient rather than hers.</p> <p>Participant 20: But that was changed to like added to our list nurses were then doing trash cans and all the above. I think it became almost like a hospital policy. If not, I mean, I never questioned it. knew it was something that we were doing.</p> <p>Participant 25: I've never really been the sole charge nurse before.</p> <p>Kind of kind of I mean, it was not like it's not good. It's like a temporary thing. But literally, we set somebody out. And the next morning, I saw the the isolation unit was open, and I was the nurse over there. And I was like, this is happening. I actually cried when I saw.</p> <p>Participant 28: There was a lot of panic on our unit. A lot of people on our unit. Some people are refusing to go into COVID rooms, period, like some of the techs just were, I'd rather lose my job then go in there.</p>

(Continues)

TABLE 2 (Continued)

Themes	Subthemes	Quotes
Avoiding infection	Patients at risk/nurses at risk	<p>Participant 1: Yes, I actually had in the beginning, I had a patient she was tested. Testing on admission. She was fine. She was negative. And then they had to swab her before a procedure. And she came back positive after she had already been there for I think two or three days. They did. They canceled the procedure, they put her on the COVID floor. She had her dad, her dad could not leave so her dad was there. So the parent that was there had to stay so they had to quarantine there for the 14 days. He could not leave.</p> <p>Participant 16: But our floor is COVID free has been COVID free since August, and one time we did get a COVID patient because somehow their rapid came back negative. And then they kept having high fever. So we did another COVID. And then it came back positive. So they were put into an airborne room on my unit, because there was no room in the covid floor.</p> <p>Participant 13: they would not come in with COVID. But they would come in like, for a stroke or just like a normal med surg problem. And then we were testing them to send them out to like rehab, or even like, sometimes, like, they would just start to have symptoms, and we would test them and they have come back positive.</p> <p>Participant 25: And there was a point in time where they were like you have to put two people together in the same room. Both are pending results. Who are you going to put together?</p>
	Risking your family's health	<p>Participant 4: So it was very chaotic, especially as a new nurse trying to orient to the ED and being thrown into the middle of the pandemic like it was just it was very difficult and I was also scared because I was at the time I was living at home with my family. Still and my grandfather he lives with me. And he moved out and then I ended up getting my own apartment so I could quarantine from my parents because my mother is high risk. So to try to avoid that exposure to my parents. I would change into the clothes I came in. And then I would go up there straight into the shower. And then my dad would heat up like, we have this Indian like home remedy. So we know that it seems like it's in the nasopharyngeal area. And I would, I would kind of do a steam facial or whatever, like whatever, it's called. It's called Nock?? In Indian, I do not know what it's called in English. But it's just you know, it's just Vicks and it's steaming water, and you just put that into that helps kills like all the bacteria or viruses or whatever is like still in your nose. And I did that every night. And then I would go to sleep. Yeah, and I try to keep a safe distance. But I moved out quickly after the pandemic started.</p> <p>Participant 5: How long do I have to be scared to see my family?</p> <p>Participant 6: they always said always said I choose the most strangest specialty. I like oncology, dialysis, hospice, I've done that. And so like when it came down to COVID, my mother was freaking out. We just jumped in. And I know you are going to be so fast and rash that we will get infected. And I was like great thanks for the vote of confidence.</p> <p>Participant 11: I still live with my parents. So I was nervous about giving it to them. But I was more nervous about giving it to like my, my grandma or my aunt, or just like family members that I know, like, would have bad outcomes if they got COVID.</p> <p>Participant 14: trying to keep yourself safe. Keep yourself away from the family, you know, have also been pretty hard.</p> <p>Participant 15: And at the time, like I really, because I was in that environment and quarantining but I was with the like, one other roommate. And I could not like I would have preferred, like to be with my family. But that wasn't really an option for me, because of everything, you know, like, I would not want to expose them to the virus and everyone because I was going into work every day. And then on top of it, a lot of our seniors, like, our senior staff got most of them got COVID. So they actually were not really there during the full time.</p>

TABLE 2 (Continued)

Themes	Subthemes	Quotes
It was so sad	How can I explain?	<p>Participant 4: So these patients are there alone. They're scared. They're, they are getting intubated, and the families are outside or they keep calling and they are just wondering how they are doing. They just want to see them. As a nurse, it was a lot for me to reassure them saying, you know, they are okay. When I kind of know that, Oh, no, this patient got intubated. But I do not think they are gonna make it out where I know that, like, you know, once they get intubated, it's like, what do I say to reassure them, and they are just like, we are taking really good care of them. And we are taking really good care of them. But at the end of the day, it's just like, you know, that once they are once they are intubated, their chance of survival significantly decreases</p> <p>Participant 5: I guess I wasn't talking to families as much because like I said, I was working night shifts through the first part of the pandemic. But I did talk to them occasionally on the phone I wasn't prepared for it I did not know what to say. Even being a new nurse and talking to family members is kind of scary, because you do not know everything that's going on, but especially COVID. It's like, you really do not know what's going on. And you really cannot tell them, you know, they want to know, like, how are they doing? Are they gonna get better? And it was it was so unknown. So much could change so quickly. Yeah, they are doing okay, right now. But that's not to say that things would change.</p> <p>Participant 10: When COVID hit, absolutely no one was allowed to come and visit. So if their loved one was about to pass, they, they were not allowed to come in. Just recently, have we started allowing visitors but you know, we now have specific times and only one person, unless it's a life decision making thing. But when COVID was there, we were the only way they knew how their loved one was doing. So I spent a lot of time talking to family members, because I feel like they needed that.</p> <p>Participant 10: So kind of two different scenarios when a family member decides to make their loved one comfort care, meaning they say, Okay, that's it, we are done. You know, we do not want to put them through this anymore, we do turn off all the drips that are, you know, probably keeping their blood pressure up and keeping them sedated. And then we usually would start a morphine drip and get out of and if we needed that to them. And then we would turn the ventilator off. In the beginning, we actually were not fully activating them, because they thought that once you extubated them that it released everything into the room. So they would actually stay intubated for a while, but we would turn the ventilators off, but they were essentially made comfortable. However, we could keep them comfortable until they passed, then that's what we did.</p> <p>Participant 14: I just started as a new grad in January of last year, so COVID just started as well. So it was kind of hard, especially with the visitor restrictions, because you are trying to update families, and you cannot go there's no one in the waiting room and calling family members and they do not really know what's going on. Of course, they are thinking the worst because of what they have seen on TV with COVID.</p> <p>Participant 17: And last year, I was 22. Which is when this particular situation occurred. I had a patient... He was like intubated, and prone, sedated, not feeling well. And it was right around May. And I'm talking to this girl on the phone because it's her dad to the hospital. And I remember her saying how it was her dad who cannot talk. And she was going to be graduating from college tomorrow. And the situation was I just might have been like, I'm only two years older than this person. And it was incredibly sad.</p> <p>Participant 22: I think that was the hardest part too to talk on the phone. Especially. It was always hard, especially if the patients were very sick. It was always hard like, putting into words. They had to say it in a way that, you know, they are not, like hurt as much. So I think I think that was really hard. And it was even harder. After can we please come in? You know, I could not agree, Look, I'm like, I'm sorry. But because of COVID. You guys cannot come. And it was so hard and I thought about that.</p>

(Continues)

TABLE 2 (Continued)

Themes	Subthemes	Quotes
	So much death	<p>Participant 2: I mean, because, you know, the things I've seen as far as like my patients, all my patients, I think, deteriorated. Especially my COVID patients, because they did not have family in the room.</p> <p>Participant 2: I mean, sometimes we do not, you know, we would not even put in, we were so busy that of course we are supposed to update the family members. And of course when they call in the middle of something which our secretaries like, I'll call them back, and sometimes we do not. So those things were like, I just felt like it was harder for my patients. And as much as we try if I was losing a patient and I knew they were going to die. It was always my goal to go in the room and be with them. You know, just to make sure they were not alone, basically.</p> <p>Participant 6: A lot of the COVID patients I just held their hands, they were alone. When they passed away, they taught us how immediately to dispose of the body. Because when we found out in New York, you know how things piling up...</p> <p>Participant 10: it would also get to a point where, you know, someone made a decision on how long we actually code a patient. You know, because sometimes we could code patients for an hour. You know, you have six people in a room trying to code a patient that's COVID and intubated, and you have all this gear on and you are supposed to limit. So it made our jobs like, are more challenging. I have never seen so much death when you just fight and you are just trying so hard to get someone better. And you have just sorry, you cannot. So sorry. I use the word defeated, because you know, that's just how you feel. So then emotionally and mentally, it just kind of starts to wear on you a little bit. We were trying to help you while you were here. And then it just got to a point where we did not feel like we were doing anything beneficial.</p> <p>Participant 11: Have like a 30 year old mom come in, and for just like a little shortness of breath, and then a week later, she's gasping for air and you put her in the ICU and she does not make it. It's like, it's like, you just think about that. She has kids and she's 30 like to just prepare yourself that like, this happens to everybody.</p> <p>Participant 18: I've seen a couple of deaths and that is when we would hold the iPad for the family. And that was kind of traumatic.</p> <p>Participant 21: We always have a lot of deaths in the ER, and it was hard in the beginning, seeing people die, but I guess now I've gotten kind of used to it. When they are young, we had like a 30 year old, just, it's just like, shit, that could be any one of us, you know?</p>
I learned so much	Like a crash course	<p>Participant 2: It's been a crash course for me. And I mean, it's been really hard. As far as I saw a lot of this. Within the first week, actually the first month. A lot of my patients obviously passed.</p> <p>Participant 9: It's been challenging. It's been challenging. Because you did not know what this virus was about when it first came upon us. And we did not know what to expect.</p> <p>Participant 11: I guess we just like, if we did not know what we were doing, we called a respiratory therapist, or like, it really was just like, learn as you go. And we were told that like 88 is fine. And I've even been told like several times by respiratory therapists that like, 82 is okay. And I was like that, like I'm uncomfortable with that. Like, that's not okay.</p> <p>Participant 14: if their oxygen is 94% ambulatory, they do not really stay in the hospital. So that part's gotten a lot better. Because in the beginning, we were really, I think, we were not sure who needed to stay and who could go home at that point. But now we have got like a better understanding.</p>
	We became a team	<p>Participant 4: And they were fair with it. We've rotated the shifts into the COVID bubble. And the staff there they have worked well together.</p> <p>Participant 10: We were always fully staffed with nurses, and we all of us worked a lot of extra shifts to make sure that, well, if they did not have nurses from other floors, that one of us would step in and be that safety nurse on our unit. Because when you are doing this, you know, you have to turn your patients, you you know, you, you need, you need hands, this is not a time to be like, Oh, well, I'm gonna go to lunch now.</p> <p>I think that you learn a lot about teamwork and what to do. And you are, you are kind of zoning in and focusing on on one thing. And for me, it was that that challenge of how we are balancing things and what we are trying to do and what we are trying to fix and how we are trying to fix it. And in this almost weird, twisted way, no one knew what to do. So we were all kind of playing like scientist in trying to like figure out how to fix someone, which is what we do. Where, you know, we try to fix people, and how do we fix them? And it was, it was a challenge and trying to figure out what worked and what did not work.</p> <p>Participant 16: It's been almost a year and I'm considered a senior nurse already, but it's every time new nurses come in I feel like senior nurses they always help the newer nurses. And I feel like there's a lot of teamwork on my floor.</p> <p>Participant 18: You know, going into the hospital and everything, you kind of get, like, overwhelmed with anxiety. Because I feel like it's almost like you are preparing for war in such a way. But I was teamed up with the ICU nurses. And I think my organization teaming up with them, it kind of relieved some of the stress from them. It was like a team effort.</p>

Abbreviations: CDC, Centers for Disease Control; ICU, intensive care unit; PPE, personal protective equipment.

pandemic. The first participants were interviewed in early March of 2021, with the final interviews taking place 2 months later, in late May. All of the participants had approximately 3–10 months of experience working as a staff nurse when the pandemic hit the US, and less than 2 years of RN experience at the time of these interviews.

New nurses who started their career right before or during the COVID-19 pandemic did not know that the hectic workplace, and the frequent exposure to infectious disease and death was not the norm. Most of the nurses in this study immediately focused on the availability of PPE when the first COVID-19 patients were admitted to their unit. This focus on PPE made it seem that fear of infection and potential to spread the infection to others were the participants' most important concerns during the pandemic. A qualitative study of 14 nurses in Sri Lanka who were caring for COVID-19 patients reported that they believed they were at increased risk of getting infected, and that this risk was unavoidable (Rathnayake et al., 2021). One nurse stated, "No matter how many safety precautions we take, if there is a slight mistake, we need to be afraid," (Rathnayake et al., 2021). Besides the fear of their own susceptibility, the nurses' greatest fear in their study was that they would bring the infection home to the family, and so they separated from their children and family elders, yet this separation was described as intolerable.

Personal protective equipment supply has been a concern in past epidemics. According to Shenoy and Weber (2021), there was not enough PPE for health care providers during the Ebola epidemic. Studies from various countries during the COVID-19 pandemic have found that nurses did not have adequate access to the needed safety equipment or were not comfortable with its use. This was true from Sri Lanka (Rathnayake et al., 2021): "The first time a patient with COVID-19 was admitted to our hospital, I had and still have a feeling of intense fear, I was very afraid of the patient himself," to China (Liu, Zhai, et al., 2020): "Dealing with this kind of public health event is very different from normal work, even the steps of putting on and taking off protective clothing are different, so we need to learn again," to South Korea (Lee & Lee, 2020): "First of all, just doing my work while wearing PPE was hot and difficult. When wearing an N95 mask, it was really difficult to breathe, and I even felt dizzy at times."

Participants were extremely fearful of providing care to COVID-19 patients. This response was likely related to the fact that this was a new infectious agent of which little was known at the start of the pandemic, and the fact that as new nurses the participants had no past knowledge of what to do or what to expect in such a crisis. Also, nursing departments were not likely to be orienting new nurses to these sort of disaster-related skills. Although experienced nurses may have had the lived experience of caring for patients during other disasters, new nurses could only rely on what they were taught in school. Therefore, if nurse educators have not used recent history of wide scale disasters or pandemics to revise their orientation curricula, new nurses would not be prepared for such an event.

Lee and Lee (2020), in a qualitative study from South Korea, described situations and feelings that were very similar to those reported in this study. Nurses did not have time to adequately prepare

to care for COVID-19 patients, and had received limited information about the virus, its route of transmission, and symptoms. Clinical guidelines were changing rapidly and due to limitations on visitation nurses were responsible for all aspects of patient care including emptying trash and room maintenance. The respondents in the South Korean study reported that they had much more contact with patients than did doctors, who tended to avoid going into COVID-19 patients' rooms and that they were looked upon with stigma by the general public.

Liu, Luo, et al. (2020) interviewed nurses caring for COVID patients in Wuhan, the city in which the COVID-19 outbreak began. Like this study's participants, these nurses reported the need to learn how to care for critically ill and ventilated patients very quickly, as some of the nurses had worked on general wards prior to the outbreak. They reported fear, and the need to provide all patient care required, to the point where they were not able to drink water or go to the bathroom during their shift as that would require removing and wasting PPE. Most of the nurses stated they had insufficient knowledge and skills to manage patients in an infectious epidemic, yet when they saw a patient recover and leave the hospital, they were proud of their role in caring for that patient.

For new nurses, caring for dying patients is usually a rare event. In an integrative review, Xia and Kongsuwan (2020) reviewed studies from the US and China and found that younger nurses, with less nursing experience, and less knowledge of death and dying were less comfortable caring for dying patients. In this study, participants did not think they had learned enough in school to prepare them to care for dying patients or to talk to their families, and the urgency of so many deaths, with no family at the bedside, was very distressing. Widera et al. (2020) presented guidelines as to how to talk to families about their ill family member which are comprehensive and detailed, but this content is not likely to be covered in a nursing program or was it possible to even consider during the pandemic. A rushed phone call or a face time conversation became the new norm for support people to see and speak to their loved ones one last time. No one could have anticipated using technology to say final goodbyes, yet this kind of communication occurred. One lesson learned from the pandemic is the importance of spending more time on the topic of death and dying with nursing students using scenarios based on the lived experiences of nurses using role-plays and immersion experiences. Also, hospitals should include in their orientations the opportunity for new graduates to listen to nurses' stories from the pandemic, how they adapted, how they addressed the family's needs, and how they dealt with their own self-care needs based on the stress they were exposed to on a daily basis.

The pressures and challenges experienced by the nurses in this study are echoed in studies from other countries in which nurses were also challenged to meet the needs and demands of a novel infectious virus. Although new nurses described feelings that were similar to those described by more experienced nurses, the new nurses did not have the clinical experience to assist in decision making, did not have the mastery of basic skills they might have learned on planned orientations, and likely did not have the ability to

communicate their needs during a very stressful time. It does not appear, in a review of the literature, that any one country or health system was better than any other in managing the care of the critically ill, hospitalized COVID-19 patient. Nurses globally were dealing with a newly emerging and highly infectious virus, learning skills as they provided care, changing how they worked based on rapidly evolving guidelines, and balancing the needs of work and family often without proper support or equipment. And as the pandemic grew, nurses were facing new challenges—working with inadequate staffing due to their own colleagues' illnesses and sometimes even deaths, or co-workers leaving, and losing that initial public support that may have buoyed their spirits in the first few months of the pandemic.

CONCLUSION

The nurses who participated in this study expressed fear, weariness, exhaustion, isolation, and distress. Many of the respondents spoke quite warmly of their co-workers and described the development of a team-like workplace, where colleagues not only assisted each other, but also checked on each other outside of work. While the nurses in this and other studies felt that they learned a great deal living and working through the COVID-19 pandemic, will this knowledge serve them well in future epidemics, pandemics, or disasters to come?

The question is not will another infectious disease pandemic occur, but when. This means that nurses must be prepared to meet such a challenge through their education in nursing school, and through an enhanced understanding of how newly emerging diseases are studied, and how changes in knowledge can be expected to change clinical practice. Hospital nurse educators also need to revise orientation programs to include emergency management, disaster training, death and dying, and coping strategies. Although experienced nurses can compare the pandemic workload to pre-pandemic nursing, for new nurses, the pandemic experience is all they know, and it is likely to color their view of the profession. According to Kovner et al. (2014) 30% of new nurses leave the profession in their first 2 years. Unless efforts are made to intervene, anecdotal reports suggest that new nurses may leave in higher numbers following COVID-19, imperiling the retention of an effective workforce for decades to come. An acknowledgment of global efforts to improve the hospital environment and the role of the nurse, along with a concerted effort to prepare for future disasters and pandemics, can do much to retain the nurses whose entrance into the profession was so influenced by the challenge of COVID-19.

CLINICAL RESOURCES

<https://www.nursingworld.org/practice-policy/work-environment/health-safety/disaster-preparedness/coronavirus/>
<https://www.aacn.org/clinical-resources/covid-19>
<https://www.ena.org/practice-resources/covid-19>

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CONFLICTS OF INTEREST

The authors have no conflict of interest to declare.

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