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Lived Experience of Burnout and Self-Efficacy in Intensive Care Unit Registered Nurses Caring for Covid-19 Patients in U.S. Hospitals

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
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the review committee have been made.

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Walden University
2024

Abstract

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Social Psychology

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Abstract

The COVID-19 pandemic has impacted the physical and mental health of intensive care unit registered nurses (ICU RNs). Burnout in ICU RNs existed long before the pandemic; however, the massive increase in critically ill patients and the scarcity of supplies and qualified staff to care for these patients put RNs in a dangerous situation. Research addressed this topic early in the pandemic but were primarily quantitative, with minimal qualitative studies appearing later. There remained a gap in examining ICU RNs in rural hospitals in the United States. The research question for this hermeneutic phenomenological study explored the interpretation of the lived experiences of burnout, self-efficacy, and career longevity in ICU RNs who cared for COVID-19 patients in rural community hospitals. Interviews were conducted and recorded using Zoom, with theoretical frameworks of self-efficacy and work-life balance as guides. The interviews consisted of four semi structured questions about the RNs' experiences, and then the data were analyzed using Hycner's method. Understanding the current mental health status of ICU RNs and their views toward career longevity illuminates a need for intervention to protect this vital workforce. Of the seven RNs who participated, six experienced burnout, and five left bedside nursing or planned to do so earlier than previously thought, indicating a concerning trend for ICU RNs. Future research should assess the RNs who left ICU nursing during the pandemic and an evaluation of those who remained after exposure to a massive number of deaths during the crisis. Based on these results, positive social change may be possible through a new concept: the embattled nurse's syndrome which can be used to evaluate RNs' mental health.

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Dedication

I want to dedicate this dissertation to the thousands of healthcare workers across the globe that answered the call to duty—sacrificing their own wants and desires to care for the massive increase in critically ill patients while dealing with the constantly evolving landscape into the care and treatment of this mutating virus. Adding to their uncertainty of what constituted proper treatment protocols and adequate personal protective equipment (PPE) were the chronic shortages of tools, such as ventilators as well as staff. Many workers chose to stay in isolation for fear of infecting their children, only communicating with their support system via Zoom. Working long, often grueling hours without breaks, these dedicated professionals did their best to save the lives of those stricken by the virus and offered comfort in the final moments to those we lost.

May my research shed light on their sacrifices and illuminate potential interventions to protect them as well as avoid some of their challenges in the future. Let us all work to help them heal.

Acknowledgments

Stadtlander (2015) explained that no one writes a dissertation by themselves. What a true statement! The grueling process requires dedication, commitment, and the support of many that help the student on this journey. Without the support of some great people, I know I could not have completed this project!

First and foremost, I acknowledge my committee, beginning with my dissertation chair, Dr. Elisabeth Weinbaum. Dr. Weinbaum's experience with research and dedication to academia allowed me to progress through this project, as well as to grow into a scholar/practitioner.

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The greatest acknowledgment must go to my participants, who, without their stories, this study would not be. They shared intimate details of their experiences during one of the most challenging times in their careers, often sparking emotional responses. I admire their dedication to the nursing profession, specifically, to critical care.

And finally, helping me stay focused, the evening crew at the Mililani Starbucks, who made my **many** drinks with a smile and always offered words of encouragement!

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Chapter 1: Introduction to the Study

The COVID-19 pandemic contributed to a worldwide healthcare crisis, which has had a significant impact on the physical and mental health of intensive care unit registered nurses (ICU RNs). While society struggled with the impacts of any new contagions, healthcare workers also faced these same personal concerns but also the fear of caring for those stricken by the disease (Falode et al., 2021; Meehan et al., 2022). Documentation of burnout among this population existed before the pandemic; however, the massive increase in critically ill patients and the scarcity of supplies, as well as qualified staff to care for the patients, placed undue stress on these RNs. During the early phases of the pandemic, a significant number of articles appeared to address this concern, but predominantly those of quantitative design. While qualitative representation increased among the recently published articles, several sparsely covered areas remain, including ICU RNs' experiences during the pandemic while working in the rural hospital environment.

This hermeneutic phenomenological study was conducted to understand the interpretation of the lived experiences of burnout, self-efficacy, and career longevity in ICU RNs who cared for COVID-19 patients in rural community hospitals. Through a phenomenological design, the nurses were given the opportunity to share their personal interpretation of what they experienced during the many phases of the pandemic. In addition, the RNs offered any feelings they had toward their profession and how these feelings evolved throughout the pandemic. As a result of these considerations, many RNs changed their thoughts surrounding their career longevity, which is important for them

and the profession collectively. Understanding the current mental health status of these RNs and their views toward career longevity illuminates a need for intervention to protect this vital workforce. Likewise, efforts to protect this population contribute to positive social change, as without intervention, these RNs are leaving the profession and cannot be easily replaced.

Chapter 1 will cover the background of this study and provide the problem statement, purpose, research question, theoretical framework, as well as the nature of the study. An in-depth list of definitions can also be found in Chapter 1. In addition, assumptions, scope, delimitations, and limitations will also be covered, as well as the significance of the study.

Background of the Study

Medical professionals in Wuhan, China, began noticing a dramatic increase in unexplained pneumonia cases in late December 2019, prompting the notification of the Chinese Centers for Disease Control and Prevention (China CDC, 2020). Initially, all patients appeared to have a connection with the Huanan Seafood market, which dealt with freshly slaughtered animals (Mukhtar & Mukhtar, 2020). The number of infected patients grew, overwhelming the local medical facilities. With symptoms including a dry cough, fever, and respiratory difficulty, some recovered without incident, but others required significant medical intervention (Sohrabi et al., 2020). Soon, the scientific community determined the cause of this illness was a coronavirus, which was later named it SARS-CoV2 or COVID-19 (Mukhtar & Mukhtar, 2020). The coronavirus family includes the middle east respiratory syndrome (MERS-CoV) and severe acute respiratory

syndrome (SARS-CoV), two previously identified viruses known to the scientific community, each originating from animal sources (Mukhtar & Mukhtar, 2020). The China CDC (2020) reported more than 72,000 cases of COVID-19, which appeared rapidly and triggered panic as they observed the viral spread to the entire country within only 30 days. More than 1,000 of the initial patients did not survive, many of whom also suffered from comorbidities such as hypertension, cardiovascular disease, and diabetes, as well as advanced age, according to the China CDC. In addition, the China CDC also stated that nearly 2,000 healthcare workers contracted the virus.

As with any pandemic or disease outbreak, healthcare workers, specifically ICU RNs encounter stressful experiences. They must deal with the challenges experienced by society but also care for those infected with the virus, potentially placing themselves at risk. In many cases, the RNs witnessed an elevated death toll related to the virus as research efforts attempted to identify transmission sources and potential treatments for the pathogen. Often, hospitals become overwhelmed with massive numbers of sick individuals, forcing equipment and medication shortages in addition to a lack of specific treatment guidelines for the current disease (Caillet et al., 2020). The rapid changes and demands on hospital staff created physical and psychological strains on the healthcare workers, most notably the RNs, as witnessed during the recent COVID-19 outbreak (Caillet et al., 2020). Due to the pandemic, ICU staff expressed anxiety, depression, and post-traumatic stress, all areas of concern for the psychological health of these RNs (Caillet et al., 2020). Likewise, critical care RNs stated they felt the pandemic diminished the nursing force in their hospitals and expressed concern for their own career longevity

(Yang & Mason, 2022).

During the early stages of the pandemic, many researchers contributed to the body of knowledge about COVID-19; however, gaps in knowledge remained. Many studies involved quantitative design from university-based facilities, exposing the need for qualitative studies as well as studies on other types of hospital systems. Rural hospitals dealt with the COVID-19 surge of patients, but with fewer resources than the larger university-based facilities, this is an area that needs further evaluation. Additionally, it is important to assess the participants by gender, age, years of experience as a clinician, and aspects of personal care, such as daily exercise, which might illuminate which group displayed better coping skills (Hu et al., 2021).

In addition to a large number of quantitative studies on COVID-19 and burnout, the initial research appeared in countries other than the United States, exposing another gap. One study explained that some aspects of the burnout experiences of ICU RNs in the United States share similarities to the burnout experiences of ICU RNs globally (Gordon et al., 2021). As the pandemic continued to impact the world, nurses continued to struggle with constant exposure to extremely ill patients. Likewise, healthcare organizations and society must collectively address this growing concern surrounding the mental health of ICU RNs.

During the COVID-19 pandemic, the challenges faced by RNs forced them to reassess their overall life priorities. As they dealt with the onslaught of critically ill patients, more critically ill than previously experienced by many, the RNs began searching for new coping skills. One concept that might help identify the ability of some

to face these challenges better than others is self-efficacy. Bandura (1977) defined self-efficacy as the individual's belief in their own strength to carry out the mission or task at hand. Their belief in their ability to succeed, complete the job, and meet their perceived expectations relates to their efficacy expectation. Work-life balance was another concept impacting hospital staff, especially RNs, throughout the pandemic. Guest (2002) explained that the overall status of one's work-life balance impacts one's quality of life and that of one's family. The concept of work-life balance is multifaceted, including workload, work pace, increased technological demands, and the constantly evolving work environment, as witnessed during the COVID-19 Pandemic. Growing demands within the work environment impact the employee's participation in non-work activities, such as family or community, contributing to an imbalance.

During any crisis, each individual interprets the experience differently. Their overall feelings, ideas, and responses result from life experiences and views. This hermeneutic, phenomenological study allowed me to examine the lived experience of ICU RNs caring for patients during the pandemic and gather the nurses' interpretations of these experiences (see Dibley et al., 2020). The hermeneutic phenomenological approach relies on the individual's or participant's subjective experience (Kafle, 2011). Previous studies used a quantitative design, offering surveys for the nurses to fill out, and not allowing personal input from these participants. Utilizing a hermeneutic phenomenological design allowed these nurses to speak freely, illuminating unexplored concerns. As a result of this exploration, new ideas emerged that could influence institutional changes in the future. Changes are needed in various aspects of the

healthcare system, but without the input of those working in the system, changes may prove ineffective or counterintuitive. The current study explored the experiences of ICU RNs working in rural hospital systems during the pandemic, illuminating aspects that may help support necessary changes in future processes.

Problem Statement

In December 2019, medical experts observed an outbreak of unexplained pneumonia cases in China. Soon identified as a novel coronavirus, this organism rapidly spread across the globe, earning the World Health Organization's (WHO's) title of a pandemic in March 2020 (Gualano et al., 2021). SARS-CoV-2 or COVID-19 infected hundreds of people with a contagion that medical experts did not know how to treat, leaving a growing mortality rate as well. In July 2020, the confirmed cases numbered more than 6 million, and the death toll was greater than 350,000, creating a healthcare crisis (Azoulay et al., 2020). In addition, limited supplies, such as PPE, and the lack of knowledge about the disease and appropriate treatment modalities also increased the stress on healthcare workers (Gualano et al., 2021). Due to the massive increase in patient load and the severity of the disease manifestation, the nursing staff worked longer hours with increased skill demands (Azoulay et al., 2020). These staff members also witnessed a decrease in collective support from ancillary services and mental health personnel's support among the missing services. The massive increase in patient load and the increased mortality rate connected with COVID-19 contributed to an increase in the level of burnout for the current staff members (Lasater et al., 2021). Burnout develops after the staff member endures exhaustive and traumatic work-related exposure (Chen et al.,

2021). These individuals report feeling overwhelmed, detached, and anxious, which can be dangerous to the nurse, the patients, and the collective healthcare system.

During the pandemic, shortcomings within the healthcare system became evident as ICU RNs struggled to care for the massive numbers of critically ill patients. Thus, the pandemic helped exacerbate existing challenges. Likewise, there appears to be a lack of understanding of the long-term impact of this horrific experience on ICU RNs, especially in rural community healthcare systems. As a result, this study helped illuminate aspects of the rural ICU RNs' experiences that are unique to their healthcare systems. Sharing the lived experiences of caring for COVID-19 patients can also explain the impact of work-life balance and self-efficacy's role. These rural ICU RNs can play a vital role in helping to reshape the future of critical care and pandemic responses. Therefore, this research will illuminate those experiences.

Purpose of the Study

The purpose of this study was to explore the lived experiences of burnout, self-efficacy, and career longevity in ICU RNs who cared for COVID-19 patients in rural community hospitals. Using a phenomenological design allowed nurses to share their interpretation of what they experienced during the many phases of the COVID-19 pandemic. In addition, this study permitted the RNs to share their feelings toward their profession and how these feelings evolved throughout the pandemic. Collectively, there needs to be more understanding of the long-term impact of these challenging experiences on ICU RNs, especially in rural community healthcare systems.

Research Question

What is the interpretation of the lived experiences of burnout, self-efficacy, and career longevity in ICU RNs who cared for COVID-19 patients in rural community hospitals?

Theoretical Framework

The first theory for this study is that of Guest (2002), focusing on work-life balance. Guest explained that work-life balance collectively implies consequences for the quality of life. Many factors influence this phenomenon, such as increased workload, technological demands, the increased pace at work, and the continual change in the work environment. Increased intensity in the work environment, such as tighter deadlines, likewise increases the pressure on the employees. As a result, growing demands at work manifest with decreased participation in non-work activities, such as family or community, contributing to a collective imbalance.

As the RNs described their lived experiences, I encouraged them to share feelings about all aspects of their lives and how their work during the pandemic impacted their personal lives, family, and community. Work-life balance plays a vital role in life stability, as Guest (2002) explained. Gathering this information will help illuminate further aspects of the collective picture of the RNs' lived experiences during the pandemic.

The second theory employed the concept of self-efficacy. As individuals pursue activities, such as work-related tasks, they maintain expected outcomes. Their belief that they will successfully complete the job and meet their perceived expectations relates to

their efficacy expectation. Bandura (1977) explained that the stronger an individual's convictions in their own effectiveness, the greater the chance they will successfully cope with the situation. Bandura's definition of self-efficacy applies to the individual's ability or level of competence in themselves and their capacity to handle the task or purpose expected of them (Mugiono et al., 2019). General self-efficacy refers to the individuals' collective self-confidence to face environmental challenges (Yao et al., 2018). Self-efficacy strongly indicates the individual's potential development of work-related burnout and stress.

During the interviews for this study, the RNs described their own interpretation of their lived experiences while working in the ICU during the pandemic, specifically caring for COVID-19 patients. And they explained how self-efficacy and work-life balance impacted their experiences during this time. The RNs revealed clues within their responses that identify their self-efficacy and potential for burnout.

Nature of the Study

To address the research question for this qualitative study, the specific research design included a hermeneutic phenomenological analysis of the ICU RNs' lived experiences of burnout and stress related to caring for COVID-19 patients during all pandemic phases within the United States. I chose this method because the hermeneutic phenomenological approach allows the researcher to unfold or uncover a more profound meaning or understanding of the phenomenon experienced by the nurses (Suddick et al., 2020). The hermeneutic phenomenological approach should exclusively focus on the participants' interpretation of the phenomenon (Dibley et al., 2020). Hermeneutic

phenomenology is used to explore feelings, values, and clarification as experienced by the participant (Santiago et al., 2018). A hermeneutic phenomenological approach allowed the nurses to dictate the direction of the dialogue and facilitate more candor than if the interview were more structured, which allows details to emerge potentially unknown previously.

Definitions

Acute kidney injury (AKI): AKI describes rapidly deteriorating kidney function, manifesting over a few hours or more slowly over days. Allen et al. (2020) explained that this deterioration in kidney function could lead to poor clinical outcomes, possibly an increased mortality rate, extended hospital stays, chronic kidney disease (CKD), or permanent need for dialysis. According to the Kidney Disease: Improving Global Outcomes (KDIGO) standards, the AKI definition entails oliguria- urinary output of less than 0.5ml/kg/hour for 6 hours and an increase in serum creatinine levels (Allen et al., 2020). The kidneys normally filter waste products from the blood in the form of creatinine; therefore, a serum increase in creatinine indicates decreased function. In the critically ill population, AKI indicates the need for renal replacement therapy to restore kidney function and reduce mortality.

Acute respiratory distress syndrome (ARDS): ARDS involves acute inflammation of the lung tissue, resulting in increased vascular permeability of the pulmonary system and respiratory distress. The Berlin definition, identified in 2012, required three criteria to qualify as ARDS: onset within one week of insult, chest x-ray with bilateral opacities, and respiratory failure (Kamo et al., 2019).

Angiotensin converting enzyme 2 (ACE2): Found throughout the body, ACE2 exists in higher concentrations within the cardiovascular and gastrointestinal tract, the kidneys, and the lungs (Wang et al., 2020). The renin-angiotensin-aldosterone system represents a complex pathway within the human body that regulates such functions as blood pressure control and inflammation. Wang et al. (2020) explained that ACE2 appears on the surface of many cells and plays an essential role within the renin-angiotensin-aldosterone system cascade, which is vital to survival. While performing a critical function, ACE2 could also play a detrimental role by increasing vascular permeability, pulmonary edema, and increased damage from SARS-CoV2 infections (Wang et al., 2020). ACE2 can contribute to the patient being at higher risk for severe infection by serving as a receptor for the COVID-19 virus.

Continuous renal replacement therapy (CRRT): Critically ill patients with AKI require immediate intervention to preserve kidney function and reduce mortality. CRRT entails using a specialized machine designed to conduct continuous venovenous hemofiltration, removing toxins from the blood, generally removed by the functioning kidneys (Eriksson et al., 2021). Specially trained ICU RNs operate the machines while maintaining all other therapies required by this patient. During CRRT, the patient's blood passes through the filtration system rapidly; this requires constant supervision of the ICU RN to ensure safety, as well as frequent calculation of the patient's fluid status.

Cytokines/Cytokine Storm: An intricate part of the immune system, these small proteins play a vital role in controlling an infectious process unfolding within the patient. A cytokine storm or cytokine release syndrome (CRS) represents a potentially life-

threatening systemic inflammatory process during which high levels of cytokines circulate throughout the body, contributing to tissue damage (Fajgenbaum & June, 2020). A cytokine storm can trigger coagulation challenges, hypoxemia, acute kidney or liver injury, as well as cardiac implications (Fajgenbaum & June, 2020).

Dyspnea: Difficulty breathing, often labored respirations (Cleveland Clinic, 2022).

Extracorporeal membrane oxygenation (ECMO): When proning and maximum ventilator support was insufficient for severely ill COVID-19 patients, placing the patient on an ECMO therapy often became the next step (Peig et al., 2021). COVID-19 triggered acute lung injury, causing pronounced hypoxemia and massive alveolar damage, creating challenges for medical intervention to treat these patients (Peig et al., 2021). ECMO entails the placement of a catheter in large vessels and attaching the patient to an ECMO machine. Essentially venovenous, VV ECMO facilitates the patient's blood through an oxygenator, acting as an artificial lung, likewise allowing the lungs to heal (Shaffi et al., 2021). These patients might require this therapy for an extended period and are slowly weaned as the patient improves (Peig et al., 2021). The ICU RN monitors this machine as well.

Endemic: A disease that follows a specific and predictable pattern of transmission, confining to a specific region, such as Malaria (Lipkin, 2021).

Epidemic: Also manifesting in a specific geographic region, an epidemic entails an unexpected rise in the number of cases (Lipkin, 2021). Yellow fever and West Nile are examples, but increasing gun violence in a specific area could also qualify as an

epidemic.

Hypoxemia: According to the Cleveland Clinic (2022), hypoxemia refers to a diminished blood oxygen level, often indicated by symptoms such as headache, respiratory difficulty, increased heart rate, and discoloration of the patient's skin, appearing blueish. Often conditions affecting the heart or lungs can contribute to hypoxemia, a condition that can be fatal. When an individual inhales, oxygen fills the sacks in the lungs called alveoli, where an exchange of oxygen and carbon dioxide occurs. The alveoli are very vascular, allowing oxygen to enter the blood hemoglobin, from which the blood transports the oxygen to the tissues. Hypoxia describes low oxygen levels within the tissues (Cleveland Clinic, 2022). It is possible to have hypoxemia without hypoxia, and the opposite, as well. Many lung and heart diseases can contribute to hypoxemia and hypoxia, including COVID-19.

Monoclonal antibodies: Antibodies are an intricate portion of the typical immune system, with the specific task of attaching themselves to foreign invaders called antigens, threatening our health. The Cleveland Clinic (2021) explained that monoclonal antibodies are laboratory-constructed clones created to attack one specific antigen. These proteins can serve in multiple treatments, including various cancers and, more recently, the treatment of COVID-19. Typically administered as an intravenous infusion, the monoclonal antibody treatment for COVID-19 is also available as a subcutaneous (under the skin) injection as well (Cleveland clinic, 2021).

Rural hospitals/Rural health systems: The American Hospital Association (2021) explained that a rural hospital serves a non-metropolitan region, usually a community-

based, nonfederal facility, that treats the general public. Frequently under 100 beds, these hospitals might be state-owned and nonprofit. The U.S. Census Bureau states that rural entails less than 1,000 people per square mile (Ungvarsky, 2022). These rural communities have fewer hospitals and, likewise, fewer ICU beds. In addition, Ungvarsky (2022) explained that there are fewer healthcare providers in rural areas, sometimes requiring patients to travel long distances to seek medical treatment.

The rural health environment holds an array of challenges for healthcare providers, including weak infrastructure, tight budgetary constraints, higher poverty levels, lower health literacy, and economic stagnation (Melvin et al., 2020). In addition, those in rural communities might engage in poor health practices, such as smoking and poor diet, contributing to poor outcomes (U.S. Department of Health & Human Services, 2017). Many within the rural community are uninsured or underinsured, presenting additional challenges to meeting their healthcare needs. Rural health facilities rely on high-profit services, surgeries, or procedures by which they receive reimbursement to fund their operations (Melvin et al., 2020). When an event interferes with these procedures, such as the lockdown after the pandemic's start, the operations' funding becomes threatened. Also, rural communities often have minimal or no internet access and therefore suffer from a lack of health-promoting information, placing them at higher risk and presenting additional challenges for healthcare providers.

Pandemic: A pandemic entails a rapid proliferation of a disease over a large area, usually several countries. Lipkin (2021) explained that the virology or the immunity status of the citizens are not factors but, instead, the rapid spread across a large region.

Prone positioning: Critically ill COVID-19 patients with respiratory distress often require intubation and invasive ventilator support to maximize oxygenation (Binda et al., 2021). These patients frequently suffer severe hypoxemia despite maximum ventilator support; therefore, advanced therapy might be necessary in many cases, such as pronation or placing them face down. Placing the patient in a prone position can offer consistent lung aeration and improved oxygenation (Binda et al., 2021). Considered an advanced treatment modality for ARDS, proning can improve the patient's gas exchange, likewise improving survivability from this critical state. Patients usually remain prone for 12-16 hours daily, requiring RNs to orchestrate turning the patients safely (Binda et al., 2021). With the patients fully sedated, they cannot assist, placing all the weight on the staff; often, these patients have an elevated body mass index, as well. During the turning process, there is a risk of dislodging the endotracheal tube or any of the intravenous catheters, as well as other equipment, which is critical to the patient's survival (Binda et al., 2021).

Ventilators: Patients suffering from respiratory distress require advanced intervention to relieve the condition, prevent hypoxemia, or possibly death. One such intervention involves the use of a specialized machine called a ventilator. The National Heart, Lung, and Blood Institute (2022) explained that the patient, unable to inhale adequate oxygen, requires either invasive or non-invasive methods of assistance. The non-invasive approach utilizes a fitted mask with positive airway pressure. However, the invasive approach entails using an endotracheal tube inserted through the mouth and into the trachea/lungs, attached to the ventilator; a procedure called intubation. The ventilator

creates the effect of bellows, instilling positive airway pressure into the patient's lungs, promoting ventilation, and relieving hypoxemia (National Heart, Lung, and Blood Institute, 2022). The ventilator settings can be customized to the patient, based on need, and weaned as the patient improves. The patient requiring a ventilator is usually in the intensive care unit, where they can receive advanced care.

Assumptions

For this research project, I initially planned to contact the state licensing boards in all 50 states to disseminate my recruitment flyer; however, after contacting 12 state boards, only one, the state of Alabama, agreed to cooperate. Therefore, my first assumption was that the state licensing board staff for Alabama would send my flyer to the currently licensed RNs in the state. However, upon recontacting them, the Alabama licensing board legal team denied my request, stating concerns for the potential illumination of poor care provided in their state. I then posted my approved flyer on Facebook and LinkedIn. My second assumption was that I would gather enough participants for an adequate sample size (eight to 10) or enough to reach data completion. I only received two RNs from social media and used RN referral for the rest. My final assumption was that the participants would answer the questions truthfully, offering insight into their lived experiences caring for COVID-19 patients.

Scope and Delimitations

The current study focused exclusively on ICU RNs living and working in the United States. The criteria for acceptance into the study included at least 2 to 3 years of specific ICU work experience before December 2019. Their exposure must also include

working with COVID-19 patients from December 2019 through the present, including care through all documented waves of the disease manifestations, excluding those who left the ICU environment during the pandemic. In addition, the included RNs must work in a rural health system, as identified by the American Hospital Association (2021). These criteria support the desire to evaluate experienced ICU RNs instead of those new to nursing or those pulled into the ICU from other departments. The ICU environment requires specialized skills and knowledge that only experienced ICU RNs possess. A recent graduate RN or an RN from a different department will not have these skills or knowledge base; therefore, burnout may appear differently than that of the existing staff members. Likewise, the criteria excluded those who left the ICU, which could alter the ability to generalize the results thoroughly.

Burnout among staff can degrade the quality of their care, placing the patients at risk. Burnout manifests when staff members endure exhaustive or traumatic work exposure (Chen et al., 2021). In many areas, ICU RNs dealt with chronic understaffing before the pandemic; likewise, the massive increase in patient load and the increased mortality rate connected with COVID-19 contributed to an increase in the level of burnout for the remaining staff members (Lasater et al., 2021). Understanding the RNs' experiences may help illuminate areas of specific need to prevent further mental strain for the nurses.

One theory not utilized for this study but discussed in the literature review is resilience. Covered extensively in the literature, Ahmed (2015) described resilience as the individual's ability to cope with or recuperate from an adverse situation. Individuals who

adapt to challenging or traumatic experiences or a series of experiences may possess strong resiliency. Ahmed shared that there are several theories surrounding resiliency, explaining that this concept could relate to the dynamics of the individual's childhood or family development, as well as their emotional or spiritual perceptiveness. Mealer et al. (2017) also explained that resilience might also impede the development of PTSD.

Each individual experiences and, likewise, interprets their experiences in unique ways. Therefore, the ability to transfer the results to another population will present challenges for the researcher (Dibley et al., 2020). Thorough and transparent descriptions of the interview environments and the data analysis process will help support the potential transferability of the study. I aimed for balance, openness, and transparency throughout the study. My ability to maintain strict audit trails will help this process; this information could be valuable for future policy and practice standards changes.

Limitations

The most prominent limitation of the current study is that the virus continues to evolve, impacting the globe, specifically healthcare workers. The research plan involved assessing ICU RNs in the United States; however, the virus continues to mutate, causing outbreaks in various parts of the country. In addition, the goal was to find experienced ICU RNs, who worked during the entire pandemic, excluding those who left the field.

Another factor for consideration was that the influx of ICU patients overwhelmed many healthcare systems, creating critical shortages of ICU RNs. In some regions, the hospital administrators pulled non-ICU-trained RNs to help. This research plan did not include that population; however, those individuals may suffer vicarious trauma or even

post-traumatic stress (PTS) from their exposure. Likewise, addressing these individuals may prove valuable in future research, as they may struggle from that experience.

Attempting to gather a participant pool of ICU RNs from across the country presented challenges. The study only included RNs with a current nursing license. Since only one state, Alabama, initially agreed to disseminate the recruitment flyer, I relied on social media to recruit from other parts of the country. I needed to use several social media outlets, such as various Facebook groups and LinkedIn, to ensure enough participants respond. Likewise, the respondents did not offer a cross-section of RNs in the country. Also, the plan involved using the Zoom platform to conduct the interviews; therefore, technological challenges may ensue. Using a tape recorder to back up the recorded interviews helped preserve data.

Another potential limitation is that the RNs may feel embarrassed about their inability to cope, feeling they failed their profession or their patients. Burnout entails emotional exhaustion, decreased sense of personal engagement, and depersonalization (Hu et al., 2021). As a result, they may reject invitations to participate in a study about the negative experience they endured. Likewise, the researcher could have encountered an RN suffering from mental distress, or the interview might have triggered a reaction. Such a reaction would require appropriate interventions immediately, referring to a licensed professional as needed. Although the interviews were emotional, no negative reactions were observed.

Researcher bias could also be a limitation. I worked as an ICU RN for more than 40 years, including the first wave and the start of the second wave of the COVID-19

pandemic; therefore, I may have held some bias toward the subject matter. Several tactics that helped with isolating researcher biases are bracketing, phenomenological reduction, and journaling. Bracketing and phenomenological reduction empower the researcher to isolate their preconceived ideas or thoughts and fully engage in the emerging data (Hycner, 1985).

Significance

This study is significant because it illuminates burnout among ICU RNs due to the COVID-19 pandemic increasing the patient load and the severity of the virus, which forced ICU RNs to work longer hours, care for some of the sickest patients they had ever seen, and increase their skills (Azoulay et al., 2020). In addition, the decrease in psychological support personnel also forced ICU RNs to deal with their grief in isolation, which is different from previous events such as September 11th (Ornell et al., 2020). Burnout develops as the staff members face exhaustive and traumatic work-related experiences, often over an extended period (Chen et al., 2021). Burnout among ICU RNs can negatively impact the quality of their care, placing the patient at risk. While burnout is well studied and known to ICU RNs, the pandemic impacted nurses in new ways, increasing the risk for the nurse and the patients collectively. The current research project aimed to fill the existing gaps surrounding this new level of burnout, illuminating the unique characteristics manifested as a result of the COVID-19 pandemic. The project gathered ICU RNs' interpretation of their COVID-19 experiences, highlighting the unique aspects of this experience over their previous experiences. This qualitative study sought participants from rural hospital systems instead of previous work focusing on RNs

from university-based facilities, filling an existing gap. The knowledge gathered from this study highlights these smaller healthcare systems' unique needs, an area sometimes forgotten.

The current study can help ICU RNs understand and acknowledge their burnout, PTS, or vicarious trauma, recognizing the signs and acceptable treatment needs. The study can also help hospital administrators understand the severity of burnout and the need to provide appropriate treatment for their staff members. In addition, the study may also help garner community support for the ICU nursing staff, acknowledging their needs. By illuminating the aspects of burnout or PTS due to the COVID-19 pandemic, psychology professionals may see the opportunity to develop new interventions designed to support the ICU nursing staff earlier, potentially preventing further burnout, currently and in future situations. Likewise, the study could provide the knowledge and evidence needed to initiate policy changes to protect RNs in the future.

Ultimately, this study draws attention to a growing phenomenon that can pose a harmful threat to safe patient care in intensive care units in the United States. When the RNs continue to work in these high-stress areas, their burnout or PTS will escalate, placing them at risk for further physical and mental health concerns. Such manifestations may impact their well-being and career longevity, creating an increased nursing shortage. Finally, this study supports positive social change by illuminating a growing phenomenon that could further increase the death toll related to unsafe practitioners at the bedside. The RNs' experiences may help identify and therefore contribute to potential interventions to protect the mental health of ICU RNs in the future.

Summary

The appearance of the novel coronavirus and its rapid spread across the globe impacted every aspect of society in unprecedented ways, but ICU RNs dealt with challenges never experienced before. These challenges often overwhelmed hospitals with massive numbers of critically ill patients, forcing equipment and medication shortages, as well as a lack of specific treatment guidelines for the virus (Caillet et al., 2020). The increased demands and lack of resources contributed to undue physical and psychological strains on the RNs during the COVID-19 outbreak (Caillet et al., 2020). This study illuminated some of the challenges and identified the RNs' interpretation of their experiences to increase awareness and the need for intervention for the staff.

Within Chapter 2, the literature review begins by exploring the theoretical frameworks of the study and then the etiology and proliferation of COVID-19. ICU RNs often face new diseases throughout their careers and must adapt their care models based on the unique aspects of the new condition. However, SARS-CoV-2 appeared quickly and spread across the globe, forcing RNs to respond with minimal resources. Understanding the disease manifestation will help understand the unique position the RNs found themselves in and why this presentation impacted them differently. Within Chapter 2, I also share a historical look at the manifestation of previous pandemics and what lessons the scientific community gathered that helped with the current presentation. Also covered in Chapter 2 are burnout, post-traumatic stress, vicarious trauma, compassion fatigue, and resilience. Also addressed are the unique aspects of the COVID-19 pandemic toward the manifestation of burnout for the ICU RNs caring for these

patients. The efforts to understand the experiences of these RNs working in the ICU during this crisis will benefit from a thorough illumination of the specific details of the disease, the treatment modalities implemented, and the unique working conditions the RNs faced.

Chapter 2: Literature Review

Burnout existed long before the pandemic, a concept well-known to ICU RNs. Many ICU RNs experienced chronic understaffing before the pandemic, but the massive increase in patient load and the increased mortality rate connected with COVID-19 contributed to a rise in burnout for the current staff members (Lasater et al., 2021). During the pandemic, shortcomings within the healthcare system became evident as ICU RNs struggled to care for the massive numbers of critically ill patients. Thus, the pandemic exacerbated existing challenges. ICU RNs have continued to work under unsustainable conditions since the start of the pandemic (Bourgault, 2022).

Collectively, there needs to be more understanding of the long-term impact of this challenging experience on ICU RNs, especially in rural community healthcare systems. This study helps to illuminate aspects of the rural ICU RNs' experiences that are unique to their healthcare systems. Sharing the experiences of caring for COVID-19 patients helps to explain the impact of work-life balance and self-efficacy's role. These rural ICU RNs can play a vital role in helping to restructure the future of critical care and crisis responses. Therefore, this research illuminates these experiences. The purpose of this study was to explore the lived experience of burnout, self-efficacy, and career longevity in ICU RNs who cared for COVID-19 patients in rural community hospitals.

In this chapter, I provide information concerning the COVID-19 pandemic and the contributing factors surrounding the burnout of healthcare workers, specifically ICU RNs. Initially, I discuss the theoretical frameworks employed for this study, followed by the etiology of the coronavirus and its spread across the globe, emphasizing the unique

aspects of COVID-19 and the pandemic response. The next discussion focuses on what the scientific community learned from previous pandemic events and how that information influenced the current status. I then explore the concepts of burnout, PTS, vicarious trauma, compassion fatigue, and the unique aspects of burnout specific to ICU RNs during the COVID-19 pandemic and the contributing factors. Finally, I discuss some of the interventions administrators attempted to ease the challenges for the nursing staff during the pandemic.

Literature Search Strategy

This qualitative study aimed to allow ICU RNs working in rural hospitals in the United States during the COVID-19 pandemic to share their lived experiences of caring for these critically ill patients. A comprehensive search of the Walden University Library databases and Google Scholar using keywords Nurs*, ICU OR intensive care OR critical care, Burnout OR Stress, Work-Life Balance, Death OR Dying OR End of Life, COVID OR coronavirus revealed a plethora of studies. Databases included Thoreau, PubMed, CINAHL, and MEDLINE.

The rapid onset of the COVID-19 pandemic illuminated a significant void surrounding the information available about this virus. Since the initial appearance and subsequent virus identification, medical professionals quickly realized they lacked the necessary details to care for these patients. Information about the nature, contagion level, and appropriate treatment modalities did not exist; therefore, many within the scientific community rapidly produced articles based on the initial observations by those treating these patients. Garrett (2020), a medical science journalist, warned information seekers to

beware of hastily published articles, warning of a potential compromise of traditional publishing practices to release the reports quickly. The rapidly changing environment created increased challenges for medical professionals as various mutations manifested. Collectively, the scientific community attempted to share as much data as possible to help combat this deadly virus.

Theoretical Framework

Self-Efficacy

The pandemic forced many to reevaluate their priorities and their general life focus. Healthcare workers and RNs specifically faced undue stress beyond any previous experiences, which caused them to search for coping skills. One concept that might help identify the ability of some to handle the situation better than others is self-efficacy. Bandura (1977) defined self-efficacy as the individual's belief in their own strength to carry out the mission or task at hand (see also Mugiono et al., 2019), which allows them to face environmental challenges (Yao et al., 2018). As individuals pursue activities, such as work-related tasks, they maintain expected outcomes. Their belief that they will successfully complete the job and meet their perceived expectations relates to their efficacy expectation. Self-efficacy strongly indicates the potential development of work-related burnout and stress. Many studies connect personality traits and emotional stability with developing burnout (Alessandri et al., 2018). Hospital administrators should consider evaluating the staff nurses' self-efficacy as part of any resilience model, supporting the prevention of burnout among the staff members (Liu et al., 2019).

Bandura's self-efficacy theory maintains widespread acceptance, and many

scholars note that the model is effective because of the results they obtain; however, these results are not provable. According to Lee (1989), it does not support our understanding of human behavior because the efficacy expectation is untestable. Lee suggested that the self-efficacy theory is vague and offers a non-scientific framework. An individual's efficacy expectation manifests from a collection of previous experiences, vicarious or observed experiences, verbal inputs, and physiological exposure (Lee, 1989). Likewise, this aspect makes the theory unverifiable and lacking clarity, thereby rendering it at risk of failure. Regardless of this criticism, the current study assessed the ICU RNs' interpretation of the lived experiences during all pandemic phases. General self-efficacy can mitigate the effects of stress on burnout for healthcare workers (Yao et al., 2018). Therefore, one interview question asked them to assess their own self-efficacy status based on their lived experiences caring for COVID-19 patients. The assessment of self-efficacy helped to analyze the RNs' manifestation of burnout during the pandemic.

Work-Life Balance

One of the many factors influencing hospital staff, especially ICU RNs, during the pandemic was work-life balance. Guest (2002) explained that work-life balance collectively implies consequences for the quality of life. Many factors influence this phenomenon, such as increased workload, work pace, technological demands, and the constantly changing work environment, as seen during the pandemic. Increased intensity in the work environment, such as tighter deadlines, likewise increases the pressure on the employees. Employees working longer hours also suffer increased negative repercussions, impacting their personal lives and work performance (Iacovoiu, 2020). As

a result, the growing demands within the work environment manifest with decreased participation in non-work activities, such as family or community, contributing to a collective imbalance. If an institution invests in activities to promote work-life balance for the employees, the overall stability of the organization will improve, minimizing burnout. Employee well-being is essential to not only the long-term stability of the institution but also offers an indication of overall productivity (Stankeviciene et al., 2021). A healthy work environment will contribute to efficient and strategic functionality of employees, with lower health care costs or absenteeism.

While the concept of work-life balance has gained a fair amount of attention in the past few decades, there are concerns affiliated with the theory. In some cases, the view of this theory may have involved some oversimplification. Lewis et al. (2007) explained that many changes in the work environment dynamics over the years also required linguistic changes for the discussions surrounding the concepts. During the 1960s, many women entered the workforce to support the family, contributing to conversations about working mothers or two-income families. As the dynamics continued to evolve, the workforce changed, with men and women working, often each full time. The term "work-life balance" offers a broader focus; however, it may only partially describe the dynamics of the environment. Likewise, over time, various work environments may display completely different dynamics. The professional or white-collar environments versus the technical or blue-collar careers will entail completely different demands on their employees; likewise, an altered view of work-life balance makes it difficult to generalize.

Despite these concerns with the concept, work-life balance plays a vital role in life's stability (Guest, 2002). During the pandemic, the RNs worked long hours; therefore, an assessment of their interpretation of their work-life balance is critical to this study. Gathering this information will help illuminate further aspects of the collective picture of the RN's lived experiences during the pandemic. As the RNs described their lived experiences, I encouraged them to share feelings about all aspects of their lives and how their work during the pandemic impacted their personal lives, family, and community.

Literature Review Related to Key Concepts

COVID-19: Etiology and Proliferation

In December 2019, medical professionals noticed a marked increase in pneumonia cases in the Wuhan region of China and notified the Chinese Centers for Disease Control and Prevention (China CDC, 2020). The patients presented with symptoms of a dry cough, dyspnea, fever, and bilateral lung infiltrates on chest X-rays (Sohrabi et al., 2020). The cause of this illness was a coronavirus, which was later identified by the WHO as SARS-CoV2 or COVID-19 (Mukhtar & Mukhtar, 2020). This novel coronavirus was related to SARS-CoV and MERS-CoV (China CDC, 2020). The specific source remained unverified; however, the structure appeared 80% similar to SARS-CoV and only 50% similar to MERS, leading officials to place the organism in the beta coronavirus category (Rothan & Byrareddy, 2020). Though it was initially thought to be a minimal threat, officials learned that it was very contagious, transmitting from human to human and prompting the Chinese government to limit movement in and out of

Wuhan (China CDC, 2020). The China CDC (2020) reported 72,314 cases of COVID-19, with 44,672 confirmed, more than 16,000 suspected, and more than 10,000 clinically diagnosed. These cases appeared rapidly, sparking fear as the medical community observed the viral spread to the entire country within only 30 days.

Many of the early patients recovered without medical care; however, some became quite ill, requiring medical intervention. Among the initial 44,000 confirmed cases, 1,023 died, a fatality rate of 2.3% (China CDC, 2020). Most of the deaths appeared to be patients with comorbidities, such as hypertension, cardiovascular disease, and diabetes, as well as advanced age, according to the China CDC (2020). In addition, the China CDC also stated that 1,716 healthcare workers contracted the virus, possibly due to the unknown nature of the transmission of the virus initially.

The organism's structural design indicates it belongs to the coronavirus family; however, SARS-CoV2 has unique characteristics, such as targeting the lower airway, causing rhinorrhea, sneezing, and sore throat (Rothan & Byrareddy, 2020). In addition, COVID-19 patients develop gastrointestinal symptoms, such as diarrhea, which were not observed in the previous outbreaks. Officials observed that the approximate incubation period appeared to be 5.2 days (Rothan & Byrareddy, 2020). The onset of symptoms to death might range from six to 41 days, with a median of 14 days, shortened for those of advanced age or with comorbidities (Rothan & Byrareddy, 2020). On January 30, 2020, the WHO declared COVID-19 a Public Health Emergency with international concern, explaining that impediments to the disease progression required early detection, isolation, and immediate supportive treatment (Sohrabi et al., 2020).

The initial goals of officials were to minimize the economic impact of the outbreak and try to thwart misinformation. Scientific professionals across the globe worked to release open-access articles to disseminate information as quickly as possible (Sohrabi et al., 2020). Evidence soon emerged that contact tracing was vital to attempt to control the spread of the virus, as cases manifested in many other countries. As of March 3, 2020, the death toll rose to 3,112 (Sohrabi et al., 2020). Initially, medical care for the critically ill consisted of only antiviral medications, broad-spectrum antibiotics, and oxygen therapy as appropriate until specific treatment could be identified (Rothan & Byrareddy, 2020).

As the case count continued to rise, so did the death toll, increasing the strain on the healthcare systems of all regions. Initially, 66% of patients had a connection to the Huanan Seafood Market, but soon, officials observed person-to-person transmission (Jiang et al., 2020). Fauci et al. (2020) explained that one person could infect two or more people, contributing to a rapid viral spread. Officials ordered lockdowns in many areas, limiting travel and social interaction to decrease transmission (Fauci et al., 2020).

As some patients' disease processes progressed to a critical state, requiring hospitalization and often intensive care, the unique aspects of the pathogen became more apparent to healthcare professionals. COVID-19 patients display an appearance of ground-glass opacities on chest X-rays throughout all lung fields (Jiang et al., 2020). These patients also presented with fever, cough, dyspnea, myalgia, severe fatigue and unique to this virus, headache, hemoptysis, and diarrhea (Jiang et al., 2020). The more critical patients often progressed to ARDS, Acute Cardiac Injury, and AKI, and some

developed septic shock, a progression that advanced quickly for the older patient population (Jiang et al., 2020).

During the early phases of the pandemic, treatment of the severely ill presented challenges for healthcare workers due to the lack of specific treatment knowledge. Initially, no pathology data existed due to limited access to tissue biopsies or autopsies (Xu et al., 2020). Chinese doctors gathered information from the autopsy of one 50-year-old man admitted on January 21 with fever, chills, cough, fatigue, and dyspnea (Xu et al., 2020). Testing positive for COVID-19, the patient also had bilateral infiltrates on his chest X-ray. The patient received antiviral medications, antibiotics, steroids, and oxygen therapy but refused ventilator assistance, prompting his demise 14 days after admission (Xu et al., 2020). The autopsy revealed bilateral alveolar damage of the lungs and viral cytopathic-like changes resembling those seen in SARS-CoV and MERS-CoV (Xu et al., 2020).

As the case count continued to rise, the scientific community learned more about the virus, such as which treatment modalities worked and which did not. COVID-19 enters the cells through the ACE2 receptors in the alveolar epithelium (Jiang et al., 2020). Likewise, the virus triggers an inflammatory response and the release of cytokines within the pulmonary vasculature (Jiang et al., 2020). COVID-19 is a positive-stranded RNA structure with a crown-like semblance under a microscope and is responsible for generating a massive inflammatory response within the body (Shemies et al., 2021). The more critically ill patients developed a cytokine storm or CRS, which entailed a massive circulation of pro-inflammatory cytokines, resulting in extensive tissue damage (Darif et

al., 2021). The impact of CRS on the body involves damage to the lung and cardiac tissue, diminished kidney function, and alterations in coagulation, leading to clotting concerns (Darif et al., 2021).

Among the early cases in China, Zhou et al. (2020) conducted a retrospective study of 191 patients; 54, each with comorbidities, did not survive. These researchers explained that sepsis was the most common complication, as well as ARDS and cardiac injury. Three of the most critical patients received ECMO; sadly, all three perished. Medical officials also learned from these early cases the need to protect healthcare workers, especially the RNs, with strict handwashing and personal protective equipment (PPE), such as gloves, masks, gowns, and eye shields (Jiang et al., 2020).

Continuous efforts throughout the scientific community worldwide focused on finding effective treatments for the victims of COVID-19. Clinical trials commenced for antiviral drugs, as well as other medical treatments. Fauci et al. (2020) described the use of monoclonal antibodies and the efforts to create a vaccine to combat the virus. Also, Pal and Gutama (2022) discussed the advances in various treatments, such as convalescent plasma therapy, plasma obtained from recovered patient donors. In receiving Emergency Use Authorization from the Food and Drug Administration, healthcare personnel administered convalescent plasma to critically ill patients as this plasma contained antibodies that could help the patients fight the virus (Pal & Gutama, 2022).

The scientific community began to realize the need to expand research details. Fauci et al. (2020) described the need for vigilant surveillance to understand the true impact of the disease. Lipsitch et al. (2020) explained that experience with previous

pandemics illuminated the need to expand public health efforts through education, testing, and surveillance of the viral progression. These authors explained the need to document all cases, from mild to severe, to enable complete data collection. Collectively, the researchers described the need to understand the aspects of disease transmission, susceptibility, and risk factors, as well as factors concerning those who do not become seriously ill (Lipsitch et al., 2020).

As most officials agreed that testing and surveillance offered a vital aspect of understanding the disease progression, this process presented significant challenges. First, the appearance of a novel virus means there may not be a testing method for that specific organism, and manufacturing may take time (Lu & Reis, 2021). Once a testing device becomes available, the patients must come to a testing facility, potentially placing them and the healthcare worker at risk of exposure. Lu and Reis (2021) described using internet search history to track disease progression. As the virus traversed across the globe, there was an increase in related internet searches in a given area. Lu and Reis stated that individuals began searching for COVID-19 symptoms right before an outbreak in a particular area, providing an opportunity to track disease progression in real-time.

As the continued global spread of SARS-CoV2 manifested a confirmed case count of over 5.5 million by May 28, 2020, and a death toll greater than 350,000, post-infection fatigue also materialized in many survivors of COVID-19, a phenomenon witnessed with previous outbreaks (Islam et al., 2020). Such conditions have implications for those recovering from the virus and possibly being unable to return to the workforce due to the ongoing severe fatigue. Post-viral fatigue carried implications for society,

collectively forcing many victims to remain at home after recovery from the acute phases of the virus.

As of January 1, 2022, the COVID-19 death toll in the United States reached 824,000, despite massive efforts to prevent the spread and treat those infected (Salabei et al., 2022). The pro-inflammatory effect of the virus caused multiorgan involvement in many patients, promoting the need for specialized care. CRS impacts the kidneys, placing the patient at risk for renal failure or death; initiating CRRT as a bridge can allow the kidneys to heal and prevent end-stage renal disease or the need for permanent hemodialysis (Shemies et al., 2021). In addition, the patients experiencing severe respiratory distress often required ventilator support and proning, and when those interventions failed, ECMO (Peig et al., 2021).

The scientific community exerted great effort to test various treatment modalities, and develop effective vaccines. Various antiviral drugs became the focus of the study, with Remdesivir the only approved treatment for COVID-19 in late 2021, according to Bistrovic et al. (2022). Clinical trials began as early as March 2020 for vaccines to combat this deadly virus, and by September 2020, eight vaccines had advanced to Phase 3 (Murphy et al., 2021). As of December 2020, the vaccine administration began, helping to thwart the spread of the virus. Once the number of vaccinated within the community grew, the number of severely ill patients began to drop. Salabei et al. (2022) stated that fully vaccinated patients were less likely to develop severe symptoms, as previously observed.

This section aimed to illuminate the complex nature of this novel coronavirus and

the intensive care required by the healthcare team, collectively, and ICU RNs specifically. The explanations of the disease manifestation are not complete; they are only brief overviews that allow the reader to better understand the skill and knowledge demands placed on ICU RNs during the height of the pandemic.

Reflecting on the Past: Gaining Insights from Historical Pandemics

Since the beginning of the human race, diseases have impacted local as well as global societies. In some instances, the infection may only affect a small number in a particular area, such as the Zika virus in 2016- 2019, impacting the Americas (Falode et al., 2021). Alternatively, in other instances, Falode et al. explain it could be massive, as with the Black Death of 1347-1351, killing 40 % of the European population. These pathogens may be viral or bacterial, requiring changes to practices or treatment modalities, especially for identifying the source.

The transition from hunter-gatherer societies, incorporating more agricultural practices, altered potential exposures to various diseases. The collective changes in human behavior contributed to global trade and the potential spread of pathogens across international lines. Piret and Boivin (2021) also explain that the increase in human population across the globe impacted land and water use. Likewise, more people equate to the increased potential of water and land contamination and waste exposure.

Over time, each new outbreak required the scientific community to identify the organism and the mode of transmission. Without this information, it would be impossible to control the spread of the disease. In many instances, the leaders initiated non-pharmaceutical interventions (NPI), such as quarantines, sheltering in place, and face

coverings (Falode et al., 2021). Documentation of such practices appears as far back as the Black Death, also called the Plague of Justinian 542-590 C.E. (Falode et al., 2021). Preventing the spread until the mode of transmission is identified is vital to save lives.

Throughout history, as the scientific community learned more about each new pathogen, they also learned more about bacteriology and virology, likewise learning to contain the spread or prevent exposure. For example, water-borne organisms lead to improved care of water sources and control of waste (Mackowiak, 2021). As more governments learned of the potential impact of various organisms, so-to came the potential for bioterrorism. Infecting the opponent's water or food supplies, likewise sickening the troops, could offer an advantage to the perpetrators (Piret & Boivin, 2020).

Establishments, such as the WHO, were instrumental in consolidating data and likewise influencing worldwide education for improved health practices over the years. One such initiative was the water, sanitation, and hygiene (WASH) program, which aimed to support sanitation infrastructure to control the spread of contamination and, therefore, diseases (Matilla et al., 2018). Many strains of viruses and bacteria exist in animals naturally; however, when these organisms cross over to humans, the results may be deadly, a phenomenon known as spillover (Mackowiak, 2021). Also called zoonosis, such diseases have impacted global health and contributed to many outbreaks, requiring changes in sanitation practices, such as food preparation and storage.

In addition, vector-borne diseases also impacted many across the globe. Mosquitoes, various types of flies, and many other arthropods can transmit diseases such as malaria, dengue, Chagas disease, and more (Wilson et al.,2020). Therefore, controlling

exposure to vectors can help reduce the risk of contracting these diseases. Wilson et al. explain various vector control methods ranging from netting and providing physical barriers to chemical controls. Reducing the control efforts often results in a resurgence of the vector in question and, likewise, the disease infestation; therefore, continued control is vital.

As researchers gathered data following each outbreak, the required changes in human behaviors impacted those in the healthcare professions the most. Being on the front lines and caring for those infected with the disease required increased knowledge and adaptation to protective measures, such as working with gloves and wearing face coverings. To better prepare, healthcare workers, especially nurses, can study past outbreaks to learn from those experiences and understand the potential manifestation of the current event.

Many may think of the 1918 Spanish flu (H1N1) when discussing pandemic history. However, Kilbourne (2006) reported on three separate events in addition to the 1918 outbreak, including the 1957-Asian flu (H2N2) and the 1968- Hong Kong flu (H3N2). The 1918 influenza continues to carry some controversy, as details surrounding the outbreak remain inconsistent, possibly due to poor data collecting techniques. Modern scientific methods contribute to accuracy, and the sharing of data across the globe. While confusion surrounding the exact origin of the 1918 pandemic continues, one aspect, herd immunity, contributed to scientific knowledge today, influencing current medical practices (Ahmed et al., 2007).

The pandemic of 1918 contributed to a death rate of more than 50 million people

worldwide, impacting both very young adults and very old members of society (Ahmed et al., 2007). Because this outbreak coincided with World War I, many scholars assumed this pandemic had a connection to war-related concerns, such as battle stress or exposure to chemicals (Ahmed et al., 2007). Some scholars later believed these young service members suffered from a naive immune system, placing them at higher risk (Ahmed et al., 2007). Researchers revealed that those between the ages of 30 and 60 appeared to withstand exposure to the virus with minimal impact, possibly due to exposure to previous strains of similar viruses. One of the lessons health professionals learned from 1918 is that some individuals develop immunological memory after exposure to such viruses, which offers a level of defense from the current pathogen (Ahmed et al., 2007). Such information contributed to vaccine development techniques used today.

With each outbreak in history, the scientific community gathered information that collectively contributed to the knowledge of the disease process and potential modes of treatment. Sadly, most of the data collected from the 1918 outbreak were post-mortem, contributing to the fields of bacteriology and virology (Kilbourne, 2006). Likewise, the scientific community continued to gather information from each significant disease event since the 1918 event, developing a broad knowledge base to help prepare for future pandemics.

During the 1918 pandemic, the scientific community had no worldwide disease surveillance as we have today. As Kilbourne (2006) offered, many victims displayed immunological naivety, placing them at higher risk. In 1957, during the outbreak of the Asian influenza episode, the scientific community had a better understanding of the

disease process and, likewise, was better able to prepare medical students (Kilbourne, 2006). For the first time in medical history, professionals had the opportunity to witness the response to vaccines, which were considered a gamble at the time (Kilbourne, 2006). Following the Asian influenza outbreak, medical professionals continued to study the response to the disease exposure and the impact of the vaccine, contributing to the knowledge base used to combat outbreaks today (Kilbourne, 2006).

Further study of disease outbreaks revealed that the 1968 Hong Kong influenza infected a high volume of patients and had a high mortality rate (Kilbourne, 2006). During this outbreak, the communication between healthcare professionals on the frontlines and the scientific community increased, allowing further advancement of knowledge. Kilbourne reported that Air Force cadets who received a vaccine for this virus experienced an infection rate of less than 54%. The data collected during this outbreak allowed medical professionals to better understand the impact of vaccines, now seeing more positive evidence.

Throughout each pandemic event, skilled nursing care represented a critical component in the recovery of those infected. Sadly, in many of these events, healthcare workers became infected, some succumbing to the diseases. During the 1918 pandemic, many young nurses deployed to military camps to help care for the soldiers, leaving a critical nursing shortage within the United States (Keeling, 2021). In many instances, tent structures served as temporary hospital units when the hospital reached capacity, which was something that was observed with COVID-19. Keeling shared that the lessons from 1918 remain relevant today, as many of the same issues manifested. She expressed the

need to document nurses' experiences today to help prevent some of the same challenges in the future, such as inadequate supplies and public health infrastructure.

Burnout

Throughout recent decades, researchers have compiled a plethora of studies addressing the concept of burnout and its implications for job performance. First, it was identified by Freudenberger (1974), who described burnout as a failure or wearing out of the individual's strength or energy. Additional symptoms often include exhaustion, fatigue, frequent headaches, or other physical conditions, such as frequent colds, gastrointestinal concerns, and sleep disturbances (Freudenberger, 1974). Dall'Ora et al. (2020) explained that burnout also entails a lack of motivation, emotional exhaustion, and increase depersonalization, often detaching from their job commitments.

Many fields, such as nursing or social work, require practitioners to learn intimate details about their clients regularly. Maslach and Pines (1977) explain that this personal interaction may trigger strong emotional responses and stress, leading to disruptive thoughts. In many cases, the employees are initially dedicated, respected staff members. Freudenberger (1977) explained that they might gradually become fatigued, depressed, irritable, bored, or overwhelmed. Coworkers might notice decreased productivity, energy level, and passion for the profession. Maslach and Pines explain that individuals may lose compassion or concern for their clients, no longer offering sympathy or respect for those in their care. In addition, they may become angry or frustrated easily, crying or yelling at coworkers or clients (Freudenberger, 1977). The individual's change in demeanor may be a complete alteration from their original view of their profession; once seen as positive

and enthusiastic, they now feel overwhelmed and drained.

The employee suffering from burnout might resist change in the workplace, sometimes becoming cynical or suspicious. They often begin as dedicated employees, working long hours, but their exhaustion builds, and their productivity declines, forcing them to feel detached, depressed and depersonalized (Freudenberger, 1977). Burnout develops gradually, and the individual may not be aware of these changes. They may feel guilty about their inability to give more, sometimes with unrealistic expectations of themselves (Freudenberger, 1974). In some cases, the individual may begin using alcohol or drugs more frequently and suffer marital or relationship challenges (Maslach & Pines, 1977). Many distancing behaviors employed in the workplace will follow the individual home to their family, creating conflict at home as well (Shubin, 1978). They may not sleep well and often suffer other chronic health concerns.

Burnout essentially results from prolonged or excessive exposure to a stressful work environment. Dall'Ora et al. (2020) explained that the greater the psychological demands on the individual, the greater the risk they might succumb to burnout. Sometimes seen as a process, as opposed to a state of being, Dall'Ora et al. explained that increased demands and complex cases could contribute to this state for the employee, resulting in exhaustion and feelings of inadequacy. Maslach et al. (2001) explained that burnout often develops when there is a prolonged mismatch between the employee and their workload, rewards, values, perceived control, or work community. Likewise, it contributes to the employee's feelings of worth as well as their overall health.

The WHO (2019) offers the International Classification of Diseases (ICD-11),

which facilitates categorizing diseases and global patterns to support the consistency of terminology among healthcare practitioners. Their goal is a standardized approach to reporting and monitoring health conditions as they appear or evolve. The ICD-11 lists burnout as an occupational phenomenon impacting mental health rather than a medical condition (WHO, 2019). Engebretsen (2018) explained that diagnosing burnout remains challenging due to a lack of clinical guidelines. Many see burnout as a generic term describing the state of physical and emotional exhaustion and cognitive enervation, often with vague or inconsistent symptoms (Engebretsen, 2018). Some individuals describe symptoms such as headaches, dizziness, nausea, and difficulty sleeping. They also may describe feelings of dysfunction, not recognizing themselves, and feeling stigmatized by the medical community (Engebretsen, 2018). Some even report suicidal ideation as a result of their struggles with burnout.

Frequently misunderstood by the medical community, burnout sufferers may receive inappropriate treatment. Potter et al. (2021) explained that burnout and depression often develop after prolonged work-related stress; therefore, health practitioners may lump them together. While burnout displays more emotional and cognitive exhaustion, depression may display sadness and anhedonia (Potter et al., 2021). The two conditions are distinct, but burnout patients occasionally receive anti-depressant medications. Engebretsen (2018) shared that burnout sufferers may also find themselves lumped in with chronic fatigue syndrome and fibromyalgia, misdiagnosing them or brushing them off as lazy.

Continued research into the nervous system, specifically the limbic system, holds

promise for future diagnosing and treatment of burnout. Chow et al. (2018) explained that the limbic-hypothalamic-pituitary-adrenal system triggers the release of cortisol into the bloodstream, while the sympathetic-adrenomedullary system increases heart rate and blood pressure and the release of catecholamines. The current data indicates a noteworthy relationship between the limbic system and the existence of burnout in an individual; however, further study is needed (Chow et al., 2018). Current research connects burnout with cognitive dysfunction, executive function, memory, and information processing speed (Potter et al., 2021). Essentially, the individual with burnout may display slower reaction times.

Job performance and patient outcomes are strong indicators of a thriving work environment. Guo et al. (2019) explained that burnout among staff, especially RNs, can influence patient outcomes and the collective well-being of the work environment. Dall'Ora et al. (2020) explained that units reporting high rates of burnout among the RN staff members also report a higher incidence of medication errors, infections, patient falls, and patient and family dissatisfaction. Such studies illuminate the vital need to address burnout and attempt to mitigate its impact. Higher rates of burnout also equate to higher absenteeism and staff turnover, indicating a financial concern for the organization (Dall'Ora et al., 2020). Finding solutions remains vital, but preventing them is more valuable.

The concept of burnout is well-known to the caring professions; however, solutions seem insubstantial at best. Shubin (1978) shared that the best solution is preventative measures, understanding the risk factors for burnout, and engaging in more

self-care practices. Many years ago, Freudenberger (1974) shared that training could help prevent burnout. Organizations could train leaders to identify those at risk of burnout or those showing early signs and initiate changes to halt the development. Changing their roles or the level of responsibility may help reduce their stress level, or taking time off from work may also help. Freudenberger supports increasing physical exercise, group discussion, talking, and sharing with those who understand the job challenges. However, Freudenberger does not support the use of yoga or meditation, stating that the burned-out individual does not need further introspection.

Post-Traumatic Stress

Well-known to members of the nursing profession are the constant sources of stress, such as patient demands, family concerns, lifesaving procedures, as well as conflicts with administration (Rodney et al., 2021). RNs often deal with patient deaths and grieving families, all while tending to other patients, sometimes with critical illnesses. When RNs face continuous exposure to a high-stress environment, be it traumatic events, such as a motor vehicle accident, the prolonging of a patient's life with ventilator support, or assisting with painful procedures, the nurse risks developing burnout or post-traumatic stress disorder (PTSD) (Mealer et al., 2017).

Collectively, PTSD might contribute to poor job performance, higher rates of treatment errors, decreased job satisfaction, and poor quality of patient care (Rodney et al., 2021). Mealer et al. (2017) report symptoms of PTSD as increased anxiety, depression, challenges with personal relationships, and apathy with their life status. According to Rodney et al. (2021), the RN's education and a multifaceted array of skills

place them in every area of the healthcare arena, likewise increasing the demands on the nurses. RNs face direct exposure to patients more so than any other healthcare workers, increasing the potential for job-related stressors.

Initially introduced in the *Diagnostic and Statistical Manual of Mental Health Disorders,* 3rd edition, the diagnosis of PTSD has evolved over the years. Hunt et al. (2018) explained that the current *Diagnostic and Statistical Manual of Mental Health Disorders,* 5th edition (DSM V) lists the following as potential symptoms of the patient with the diagnosis of PTSD: Avoidance of traumatic stimuli, intrusive thoughts, distressing dreams, flashbacks, trauma-related amnesia, harmful ideas, inappropriate blame, irritability, sleep disruption, and anhedonia.

Rodney et al. (2021) explained that an accurate rate of PTSD among nurses is challenging, partially related to inconsistent assessment tools and survey methods. These authors explain that the rate of PTSD among the general population might be approximately eight million. Perhaps, unreported and undiagnosed PTSD among nurses might increase that number. Those with PTSD might experience distress, alterations in concentration, and intrusive thoughts, potentially interfering with the ability to deliver safe patient care (Rodney et al.).

Mealer et al. (2017) discussed the increasing nursing shortage in the United States, reaching a critical point in 2017. At that point, the RN turnover rate was approximately 13-20%, with great concern for the number of ICU RNs leaving their positions. Such losses were costly for the healthcare systems and increased the risks of medication errors, patient falls, and increased patient mortality rates (Mealer et al., 2017).

A high staff turnover rate increases job-related stress and contributes to an unstable work environment. The appearance of the novel coronavirus greatly exacerbated the existent concerns for ICU RNs.

Horesh and Brown (2020) explain that PTSD existed prior to the COVID-19 pandemic and was frequently associated with high-stress work exposures, wartime experiences, assaults, and natural disasters. COVID-19 presented a unique type of traumatic exposure, unlike previous reports, forcing psychology professionals to reexamine existing criteria and assessment tools (Horesh & Brown, 2020). These authors point out that such symptoms appear globally and present a ripple effect throughout society, prompting the need for further research.

Vicarious Trauma and Compassion Fatigue

Many enter the caring professions to provide such care to those in need, be it as a clergy member, therapist, or nurse. These individuals offer a degree of dedication to their clients, providing compassion, which Figley (2002) explained as bearing or enduring the suffering or anguish of others. Bush (2009) described compassion as holding an inner passion for those suffering and offering empathy for these individuals. This interaction's complexity could precipitate challenges, placing the caregiver at risk of developing incapacitating symptoms. While compassion remains a core value of these caring professions, Bush explained that this also requires the caregiver to balance despair with hopefulness.

In many cases, patients or clients may suffer a chronic illness from which they will not recover. The therapist or nurse providing care may offer compassion to these

patients that instills a profound sadness in themselves. Over time, repeatedly offering compassion will escalate to compassion fatigue, likewise reducing their capacity to offer further quality care. Joinson (1992) explained that compassion fatigue impacts many in caring professions; however, RNs are at the most significant risk. Compassion fatigue could manifest in feelings of helplessness, anger, frustration, apathy, or depression (Joinson, 1992). While some personality types may be at greater risk, compassion fatigue can be emotionally draining. Joinson also explained that the characteristics or traits that attract an individual to a caring profession might also contribute to the development of compassion fatigue, constantly feeling they must always give more of themselves.

Frequently manifesting among those who care for the chronically ill, compassion fatigue can also develop in other areas. Badger (2001) explained that compassion fatigue, also called secondary traumatic stress (STS) or vicarious trauma, also impacts those who care for victims of traumatic exposures. Repeated exposure to trauma victims can trigger feelings within the caregivers, precipitating symptoms such as intrusive thoughts, nausea, anger, exhaustion, and nightmares (Badger, 2001). The caregiver may experience reoccurring images, as though they, themselves experienced the traumatic event of their patients. Common among trauma workers, but also those who work in burn units, ICUs or emergency departments, or neonatal units. Over time, the continued exposure can challenge the caregiver's coping skills.

The symptoms of STS are very similar to those of PTSD; however, the individual did not suffer the traumatic experience themselves. Figley (2002) explained that STS results are simply based on knowledge of the traumatic event or what the patient

experienced. Described as a preoccupation with the traumatic experience, the caregiver may reexperience the event through the images resulting from hearing the event's details from the patient (Figley, 2002). Appearing in the DSM V, STS can be as incapacitating as PTSD, displaying emotional numbness, withdrawal, inability to experience pleasure, restlessness, and pessimism (Badger, 2001). Over time, these individuals may also struggle with alterations in their cognitive structure, becoming aggressive and irritable, unable to concentrate, and developing sleep disturbances (Badger, 2001). Such symptoms can significantly influence the caregivers' ability to continue working with this patient population.

Symptoms of compassion fatigue, STS, or vicarious trauma may not be obvious if the individuals are unaware of the signs. McCann and Pearlman (1990) explained that the caregiver's level of education or training does not impact their potential to fall victim to these syndromes, as they are common among those who care for trauma victims or the critically ill. Peacock (2023) explained that vicarious trauma results from the psychological interpretation of the traumatic event for the caregiver, imprinting on their memory. This exposure can impact the caregiver for an extended period, even after they no longer work with trauma victims (McCann & Pearlman, 1990). They may continue to suffer from nightmares, intrusive images, and even paranoia years later.

Caring for traumatized or critically ill patients contributes to compassion fatigue, STS, or vicarious trauma; however, other factors can exacerbate this manifestation. Bush (2009) explained that chronic nursing shortages contributed to increased RN-to-patient ratios, likewise forcing RNs to care for more patients. In addition, Bush explained that

insurance mandates forced shortened hospital stays, resulting in increased patient acuity, forcing the RNs to care for much sicker patients, resulting in higher stress for the RNs. These changes often left staff members feeling helpless while trying to provide quality care for their patients. In some cases, these caregivers might leave their profession, but Badger (2001) explained that there are actions to potentially reduce the impact, such as self-care activities and therapeutic intervention if symptoms are severe. However, prevention is always best.

Healthcare workers, specifically RNs, might develop symptoms that challenge their personal or professional well-being; they may struggle to identify what is happening to them. The symptomatology of burnout, PTSD, compassion fatigue, and vicarious trauma are all distinct, and a psychology professional might diagnose the individual with one or more of these disorders. However, this study aimed to understand the RNs' interpretation of their experiences while caring for COVID-19 patients, not to identify or diagnose which syndrome they might suffer. Searching EBSCO on January 11, 2023, using keywords critical care, nursing, covid-19, and only changing the syndrome revealed the following results. Using burnout revealed 238 articles, PTSD produced 89 articles, and vicarious trauma had 104 results. Therefore, in the next section, I will explore the literature discussing the impact of COVID-19 on ICU RNs, using the term burnout.

ICU Nursing Burnout Specific to COVID-19

The COVID-19 pandemic impacted healthcare facilities across the globe. The massive increase in patients pushed healthcare systems to the brink, most notably affecting the facility staff members. Caillet et al. (2020) pointed out that the

overcrowding of hospitals with critically ill patients only represented one part of the problem: the lack of proper equipment, specifically PPE, and the lack of information about the disease process weighed heavily on the staff. Azoulay et al. (2020) stated that the massive increase in the number of patients suffering from COVID-19 influenced the staff members' ability to cope, displaying anxiety, depression, post-traumatic stress, and substance abuse, all signs of burnout.

Many hospital systems were incapable of handling the massive influx of patients, struggling with a lack of supplies, PPE, and, most notably, a lack of trained ICU RNs. Mobarki (2022) explained that hospital resilience could identify the level of preparedness of a system to handle an influx of patients. When administrators fail to plan appropriately, the staff members suffer, especially the ICU RNs. Gast et al. (2022) explained that the unprecedented strain on hospitals related to COVID-19 illuminated the existing challenges, such as the shortage of ICU RNs. Staff expressed concerns about inadequate supplies, such as PPE, but also inappropriate infrastructure within the buildings. Due to the overflowing of critically ill patients, staff were forced to care for COVID-19 patients in non-ICU beds, often incapable of handling the needed equipment, such as not enough electric outlets (Gast et al., 2022). Such challenges added to the anxiety and frustration of the staff, who were already struggling with the increased volume.

Often nurses expressed their struggles with moral distress throughout the pandemic. Nasrabadi et al. (2022) shared the experiences of ICU RNs regarding the quality of care they delivered while caring for COVID-19 patients. Many expressed that

nursing is a holistic art, caring for the patient and their family; however, they felt unable to deliver that quality of care during the pandemic. The ICU RNs must care for the sickest patients and operate some of the most complicated equipment, requiring increased skill and knowledge, yet they felt they could not meet the expected demands (Nasrabadi et al., 2022). Often called heroes in public, many nurses struggled with that sentiment because they felt their care was not reaching their expected standards. As the patient population grew, but the number of staff did not rise to meet the needs, in many units, they found themselves rationing nursing care, performing only the most critical tasks. Some called the care inhumane, adding to their moral distress (Nasrabadi et al., 2022).

In addition to the overwhelming number of patients and the critical nature of their condition, many perished due to their illnesses. Saravanan et al. (2022) shared some of the experiences of ICU RNs concerning the increased death toll related to COVID-19. Despite their best efforts, many patients did not survive, forcing the nurses to move the deceased patient's body out, clean the bed and receive a new patient almost immediately, leaving no time to grieve. Nurses often felt helpless and frustrated. Rahmani et al. (2023) explained that these ICU RNs risk suffering from complicated grief. They are working long hours while exposed to a deadly virus, heavy workloads, and dealing with end-of-life care frequently, all of which can impact their mental stability.

As the pandemic continued, the pressure on the ICU RNs increased, forcing many to reconsider their life choices. The academic community, nursing organizations, and some hospital administrators began realizing the need for real-time research. Gradually, numerous research articles appeared among the published works, addressing aspects of

the RN's experiences, including more qualitative designs. Many addressed the frontline staff's experiences and their quality of life during the height of the pandemic and beyond.

One study assessed the RNs' perception of their experiences during the pandemic. Menequin et al. (2023) shared results from addressing the quality of life of ICU staff, explaining that in some units, the burnout rate might range from 25-80%, with varying degrees of impairment. These RNs reported increased anxiety and insomnia compared to other hospital staff members. The WHO explained that quality of life is the individual's perception of how they mesh with their culture and values and their ability to reach goals and expectations (Menequin et al., 2023). RN staff members in India who cared for COVID-19 patients reported a decrease in quality of life by 87% during the pandemic, according to Menequin et al., 2023)—concerning numbers that need attention to protect this vital workforce.

The ICU environment involves a multidisciplinary and differentiated focus to care for some of the sickest patients in the hospital. The unit functions include diagnosing, treating, and monitoring critically ill patients who may suddenly deteriorate at any moment, requiring immediate intervention by the ICU staff. The ICU RNs must receive increased training to assess and care for these sick patients and learn the complicated equipment. Lima et al. (2023) explained that the ICU environment manifests an atmosphere of tension under normal circumstances, but COVID-19 increased the existing challenges. Lima et al. also explained that the increased daily work overloads caused the RNs to suffer emotional exhaustion, depression, sleep disturbances, as well as feeling overwhelmed.

Collectively, the more recent studies of ICU RN burnout during the pandemic illuminate the need for a specific understanding of the nurses' experiences. A complete analysis of all dynamics is crucial to fully answer the call for change. Phillips et al. (2023) shared that multi-country studies identified some similar concerns for the nurses: lack of equipment, specifically PPE, lack of information about the virus, and an aversion to being called heroes. The new reality for ICU RNs is not without concern and questionable sustainability. These RNs can offer much-needed details about their experiences to help implement public policy changes and prepare for future health crises.

Pandemic Related Misinformation

One contributing factor to the frustration of RNs is the concept of misinformation. A level of fear exists naturally with the spread of any deadly disease; however, confusion and misunderstanding can contribute to the spread of false concepts, adding to the fear. Such rumors can breed distrust in the government, healthcare workers, and various prescribed treatment modalities. Likewise, this misinformation may cause individuals to question potentially life-saving practices, such as wearing face coverings or social distancing.

Accurate information is critical during any health crisis to help decrease the spread of the contagion and support treatment modalities. Erku et al. (2020) of the WHO explained the need for pharmacists to disseminate accurate information concerning medications needed to treat the victims. Coining the phrase "infodemic," Erku et al. explained that the spread of misinformation may have rivaled the spread of the virus, possibly faster, placing patients at risk. In addition, these authors described the massive

influx of counterfeit medications, medications inappropriate for the treatment of COVID-19, also putting patients at risk. If a patient takes the wrong medicine, their virus will go untreated, and they may end up in the ICU in a worse condition.

Since the appearance of the novel coronavirus in December 2019, researchers have flooded the literature with many articles, creating a chaotic release of information, lending to confusion (Shobowale, 2021). Combining this confusion with the increased use of social media, which may serve as the primary data source in some regions, false information spread rapidly across the globe. Shobowale explained that social media might also serve as a catalyst to help combat misinformation by disseminating accurate details of the virus and treatments.

Understanding the rationale behind behaviors may help health professionals dissuade harmful actions. The Health Belief Model has served the healthcare community in analyzing behaviors surrounding the prevention of various diseases (Carico et al., 2020). Some aspects of this model include the perception of the threat or their susceptibility to the disease, their view of potential barriers to healthy behaviors, and self-efficacy (Carico et al., 2020). Those that struggle with perceived barriers to health-promoting behaviors or decreased self-efficacy may be more likely to engage in risky actions, increasing their chances of contracting the disease. Socioeconomic status may impact access to necessary tools to promote these healthy behaviors. Therefore, public health interventions will suffer if people's beliefs or perceptions of their ability to avoid risk are challenged due to misinformation (Shobowale, 2021).

Luo et al. (2020) explained that the impact of misinformation might influence

patient care, causing delays or avoidance of participation in appropriate treatment interventions. Health professionals should attempt to fight against the spread of misinformation, trying to share valid details. Falode et al. (2021) explained how misinformation seeds mistrust in the government and healthcare workers collectively. Likewise, this increases the challenges for RNs trying to care for these patients and educate them on the virus and prescribed treatment regimens. If the patient and their family already endorse the incorrect data, therefore, not accepting the information shared by the nursing staff will cause increased frustration, potentially leading to burnout.

Misinformation also surfaced in past pandemics, but one prominent point in history was the 1918 event. To support the government efforts during World War I, authorities denied the existence of the pandemic (Mackowiak, 2021). All countries involved in the campaign denied the existence to dissuade any concerns about the strength of their soldiers. The Spanish government offered accurate information about the pandemic within their country but was not involved in the conflict, hence taking the blame and title, *Spanish Flu* (Mackowiak, 2021). Within the United States, congress passed the *Sedition Act,* making it a crime to speak of anything that would undermine the war efforts, likewise suppressing details of the pandemic and altering historical accounts of the event (Mackowiak, 2021).

Vaccine Hesitancy Related to COVID-19

SARS-CoV-2, or COVID-19, first appeared in December 2019 but reached pandemic status on March 11th, 2020, as declared by the WHO (Murphy et al., 2021). With no existing vaccine to combat this deadly virus, it spread unimpeded across the

globe. Many scientists worked to create a vaccine, with the first clinical trials starting in March 2020 in the United States (Murphy et al., 2021). Several pharmaceutical companies invested the time and scientific resources to create a vaccine to stop COVID-19, and by September, 2020-eight vaccines progressed to Phase 3 trials, according to Murphy et al.

Well-known throughout scientific history, Kwok et al. (2020) explained that vaccines reduced many infections and eradicated others, collectively reducing mortality for many populations. However, vaccine hesitancy appeared in recent decades, inspiring concerns that led to the WHO declaration of this phenomenon as a global health threat in 2019 (Kwok et al., 2020). MacDonald and the Sage Working Group on Vaccine Hesitancy (2015) explained that vaccine hesitancy entails the delay or refusal to accept a vaccine, regardless of its availability. Murphy et al. (2021) explained that many might associate their vaccine hesitancy with conspiracy ideas and religious or paranoid thoughts inspired by mistrust in the government.

Sadly, throughout history, mistrust of the government and the medical community grew due to systemic racism or perceived unfair treatment by various populations. Bogart et al. (2021) explained that the Black American population might be more prone to such disorders as hypertension, diabetes, or obesity, all placing this population at higher risk of contracting COVID-19. Collectively, this population was more likely to contract COVID-19, be hospitalized for treatment, and ultimately succumb to the disease than Caucasian populations in many areas (Bogart et al.). As Kwok et al. (2020) explained, many individuals lack confidence in vaccines, misunderstand the intention of medical

professionals, and lack the perception of a need to receive any vaccines.

Vaccines will be the best way to contain the spread of the disease and reduce mortality, with the coronavirus impacting so many across the globe. Dror et al. (2020) explained the need for education, beginning with the healthcare community, to combat vaccine hesitancy. Conducting a survey, these researchers discovered that vaccine hesitancy existed, even among this population. Dror et al. identified that the best predictor of a willingness to accept a COVID-19 vaccine appeared among those vaccinated against influenza. In addition, RNs caring for COVID-19-positive patients were more likely to accept a vaccine.

Likewise, evidence throughout history supports the notion that vaccines help prevent the spread of many diseases and help reduce mortality. As ICU RNs witness the massive mortality rate from the COVID-19 pandemic, they most likely associate the benefits of vaccination with availability. Therefore, these RNs may suffer increased anxiety and frustration in the face of vaccine hesitancy, adding to their burnout.

Working with PPE

As medical professionals learned more about SARS-CoV2, they also learned it was a highly contagious organism, and protecting healthcare workers became a vital task. Baker et al. (2021) explained that COVID-19 spreads through direct contact with respiratory particles or aerosolization from infected patients. Likewise, many treatment modalities used to care for these critically ill patients could easily infect the staff. Therefore, measures to protect the staff members, especially the ICU RNs, their families, and other patients, became a priority for hospital administrations in areas hard hit by the

virus (Baker et al., 2021). If an RN becomes ill, they must quarantine until they recover, reducing the working force, and placing more stress on the other RNs, to meet the needs of the critically ill patients.

Most ICU RNs knew how to use PPE from previous experiences, such as influenza patients; however, few had experience working with PPE for extended hours, as needed with COVID-19 (Leaton & Ospina, 2021). In some areas, educators used simulation laboratories to help teach the RNs proper use of PPE and various procedures in the COVID-19 units to help prevent cross-contamination of other patients (Leaton & Ospina, 2021). Staff also underwent evaluations and fittings for the various pieces of equipment, such as the N95 face mask or respirator, or PAPRs required in COVID-19-positive units (Baker et al., 2021).

All healthcare workers must conduct strict hand hygiene, washing with soap and water for 20 seconds or using hand sanitizers with 60% alcohol (Baker et al., 2021). Frequent hand hygiene can disrupt the normal flora, alter skin pH, release inflammatory cytokines, and contribute to sensitivity and dermatitis (Baker et al., 2021). A breakdown of the RN's skin integrity can predispose them to further infection and discomfort, adding to their stress and anxiety.

Due to the ease of contamination from respiratory droplets, wearing an air-filtering face mask became vital. The N95 respirator is one of the most commonly used and highly effective at filtering airborne particles in COVID-19-positive areas (Baker et al., 2021). The N95 must fit properly, with a proper seal, to ensure complete protection. RNs need to plan activities carefully because wearing the N95, as well as full PPE, will

reduce efficiency, increasing the time needed to conduct patient care activities (Baker et al.,2021). Wearing an N95 for an extended time promotes mouth-breathing and drying of the oral mucosa, symptoms exacerbated when wearing double masks, which were required to protect N95 supplies in some areas (Baker et al., 2021).

The N95 specifically, but PPE collectively contributes to an increase in anxiety, humidity, and temperature (Many PPE gowns are plastic, and worn over clothing can contribute to overheating) and general intolerance to the increased demands (Baker et al., 2021). RNs with pulmonary or cardiac concerns, as well as claustrophobia, may be incapable of working with PPE. One possible solution involves bundling activities and working as a team to help improve efficiency and reduce the intolerance and overwhelming stress the RNs experienced (Peig et al., 2021).

Leaton and Ospina (2021) recommended changing the care structure using multiple teams. These authors explained the potential use of proning teams to move throughout the facility and assist with repositioning the critical patients into the prone position or reversing when appropriate. Leaton and Ospina also suggested that intubation, transport, and vascular access teams be designed to pull the most skilled team members together, improve the efficiency of tasks, and minimize the need for more PPE. In smaller, rural hospitals, such teams may not be possible due to limited resources and staff.

RNs may reach activity limitations quickly without realizing it themselves. Peig et al. (2021) recommend using a *safety champion* to ensure staff dons and doffs PPE properly, as well as observe staff for signs of intolerance. Silent hypoxia or hypercapnia

may result from extended N95 use and can impair the cognitive function of RNs, placing themselves and their patients at risk (Baker et al., 2021). In addition, PPE and the N95 mask specifically can contribute to pressure injuries, especially on the face (Bambi et al., 2021). The required tight seal of the N95 can cause skin breakdown on the nose, cheeks, ears, and chin, adding to discomfort and increasing stress for the RNs. Many RNs explained that they did not grasp the full impact of the caring demands of the COVID-19 positive patients until weeks after the peak surges (Leaton & Ospina, 2021).

Continuous Renal Replacement Therapy (CRRT) & Extracorporeal Membrane Oxygenation (ECMO)

The acuity of the COVID-19 ICU patients presented challenges for the RNs. As a result of the inflammatory response to the virus that many patients exhibited, the care demands escalated. Respiratory failure manifested in many patients, demanding provisions to improve oxygenation by administering respiratory therapy. Often requiring intubation and placement on a ventilator, proning, and for severely ill patients, ECMO. When the patient receives maximum support with the ventilator and does not improve or continues to deteriorate, ECMO may offer a chance for survival, providing an external lung mechanism (Shaffi et al., 2021). Patients with refractory hypoxemia will not survive without this intervention, providing the needed oxygen to the bodily tissues (Peig et al., 2021). The ECMO machine pumps the patient's blood through an external oxygenator, providing the necessary gas exchange to support life until the lungs heal (Shaffi et al., 2021).

Likewise, the pro-inflammatory response to COVID-19 also causes significant

kidney damage, placing the patient at risk of renal failure or AKI. Shemies et al. (2021) explained that AKI could contribute to fluid overload, placing the patient at risk for pulmonary edema or increased lung fluid and hindering respiration. These patients need CRRT to remove toxins and excess fluid, work generally done by the kidneys (Eriksson et al., 2021). Like ECMO, this therapy requires extracorporeal filtration with a specialized machine designed for this function.

ECMO and CRRT both represent advanced therapies that can save lives; however, each is labor-intensive for ICU RNs. Each requires additional training of the nurses, demanding skill and knowledge to maintain a safe balance for the critically ill patient. In addition, the RN must monitor the patient continuously for subtle changes in hemodynamic status, as well as potential complications, such as bleeding, infection, or skin breakdown near the catheters (Peig et al., 2021). While monitoring the patient receiving ECMO or CRRT, the ICU RN must also be inside the patient's room, wearing PPE, for extended periods, placing them at increased risk of exposure to the virus (Peig et al., 2021). Collectively, these therapies, while valuable for critically ill patients, can add stress for ICU RNs.

Therapeutic Proning for Critical COVID-19 Patients

The clinical presentations of COVID-19 patients can range from asymptomatic to critically ill, needing maximum therapy in the ICU. Often, those in the ICU develop pneumonia or ARDS, requiring aggressive treatment, including intubation and ventilator support. According to Binda et al. (2021), in March 2020, 30% of COVID-19 patients required hospitalization, and approximately 4% needed ICU-level care at that stage in the

pandemic.

During this phase of the pandemic, critically ill COVID-19 patients with respiratory distress received intubation and invasive ventilator support to maximize oxygenation as well as reduce the risk of spreading the virus through aerosolization with a non-invasive ventilator method (Binda et al., 2021). These patients with ARDS suffered severe hypoxemia despite maximum ventilator support; therefore, advanced therapy, such as pronation, was necessary in many cases. Placing the patient in a prone position can offer consistent lung aeration and improved oxygenation (Binda et al., 2021).

While a patient is prone, the RN's goals include increasing oxygenation, preventing oxygen desaturation, promoting clearance of secretions, and preventing aspiration of gastric contents into the lungs (Binda et al., 2021). If the patient is alert, they can assist with the turning process; however, most patients are intubated and, on a ventilator, requiring sedation. In these cases, the healthcare team must physically turn the patient to the prone position, placing the patient and the staff at risk.

Considered an advanced treatment modality for ARDS, proning can improve the patient's gas exchange, likewise improving survivability from this critical state. Patients usually remained prone for 12-16 hours per day, requiring the RNs to orchestrate the turning process safely (Binda et al., 2021). With the patients fully sedated, they cannot assist, placing all the weight on the staff; often, these patients have an elevated body mass index, as well. During the turning process, there is a risk of dislodging the endotracheal tube or any of the intravenous catheters, as well as other equipment, which is critical to the patient's survival (Binda et al., 2021).

All staff members must receive adequate training to execute the proning process safely, which requires five staff minimum, two on each side and one to manage the endotracheal tube (Binda et al., 2021). While in the prone position, the patient is at risk of developing pressure injuries to their face, chest, and knees. In the event of a sudden deterioration of the patient's status, such as hypotension (Low blood pressure), bradycardia (Low heart rate), or desaturation (Decreased oxygen blood level), the RN must initiate the return to the supine (face up) position quickly to begin resuscitation procedures (Binda et al., 2021).

Proning increases the RN's workload and responsibility for maintaining safe patient care. The physical demands, as well as the stress connected with the sudden need to turn a decompensating patient quickly, can add to the RN's stress level. In some cases, there may not be adequate staff to turn the patient safely, or the staff may lack training, placing demands on those trained to teach at the bedside.

Resilience

One concept that garners a fair amount of attention when discussing burnout is resilience. Ahmed (2015) describes resilience as the individual's ability to cope with or recuperate from an adverse situation. Individuals who adapt to challenging or traumatic experiences or a series of experiences may possess strong resiliency. Ahmed shared that there are several theories surrounding resiliency, explaining that this concept could relate to the dynamics of the individual's childhood or family development, as well as their emotional or spiritual perceptiveness. Mealer et al. (2017) explained that resilience might also impede the development of PTS. The resilient individual seems to maintain an

equilibrium and a degree of control in the face of adversity (Jackson et al., 2018). This is a concept valuable when exploring the impact of burnout or PTS.

Within recent research concerning nursing and burnout, resilience holds intriguing potential. While some believe personality types impact the individual's resilience ability, Mealer et al. (2017) explained that resilience can be acquired using cognitive or behavioral training. Such attributes as coping skills, positive interactions with others, humor, and cognitive restructuring are potential new skills the individual could learn to promote resiliency (Mealer et al., 2017). In addition, Mealer et al. also explained that nurses displaying strong resiliency are less likely to report symptoms of PTS, depression, or burnout syndrome. Frequently conceptualized as an individual concern, Aburn et al. (2020) explained that resiliency training specifically for the individual could prove unfavorable, leading to feelings of inadequacy and isolation. By addressing the issues socially, the staff members could develop a stronger systematic construct among fellow workers, realizing they share the same experiences following adversity. Ultimately, these efforts will contribute to staff well-being and safer patient care.

Attempted Interventions to Prevent Burnout

As the COVID-19 pandemic continued over what has now been more than four years, significant concerns emerged, one being the vulnerability of ICU RNs. Many now consider the ICU nursing population at greater risk of developing a stress-related mental health challenge, according to Meehan et al. (2022). Identified as a primary concern before the pandemic, critical care RNs and physicians suffered a higher burnout rate than in other areas, placing themselves and their patients at risk (Wei et al., 2020). Many

hospital administrators and nursing leaders observed the crisis unfolding and identified the need for intervention. Some efforts proved more effective than others; however, researchers continue to evaluate the long-term effects of such actions.

As the pandemic unfolded, the death toll rose globally, and the impact on critical care staff became intolerable for many. Vincent et al. (2022) explained that many restrictions or limitations on hospital functions, such as visitation, had a dehumanizing effect, adding to the mental health challenges for the nurses. Some nurses became disillusioned with the manifestations and left the ICU, while others left nursing altogether (Vincent et al., 2022). In some areas, hospital administrators initiated COVID-19 pay bonuses for those working with COVID-19 patients. Vincent et al. explained that the increased pay would only help for a short time and would not be a suitable solution for the long-term retention of ICU staff. Other factors, such as job satisfaction and work-life balance, are much more vital.

As more leaders acknowledged the need to address the staff's mental health, many began implementing potential solutions. Wei et al. (2020) explained that addressing burnout presented a multidimensional task involving many layers of the organization, such as efforts to reduce workload. Reese et al. (2022) described a program initiated at their facility to help reduce the workload for the overwhelmed ICU staff. With the massive increase in critically ill COVID-19 patients, most facilities halted all non-critical hospital functions, such as surgeries and services like physical and occupational therapy, forcing these therapists to remain at home. Reese et al. described the initiation of a partnership with ICU staff and the physical and occupational therapists, serving both

departments and the patients. As a result, this program offered productive time for the therapists and physical assistance for the ICU RNs with patient care. It also allowed the two departments to collaborate, benefiting the patients. One contributing factor to burnout is the increased workload; this program helped reduce the physical demands for the nurses, providing help with activities like proning the patients.

Addressing pay and workload remain essential factors in reducing burnout; however, other areas can also help mitigate the development. Wei et al. (2020) explained that staff members' mental health holds equal value to their physical well-being, and offering emotional hygiene could foster improved mental health. Self-reflection, setting boundaries, sleep hygiene, and adequate exercise could support the staff's emotional stability. ICU RNs contribute greatly to their profession, engaging in increased efforts to learn the specific skills required in critical care; likewise, recognition and respect for these efforts are valuable (Vincent et al., 2022). These RNs chose to work in the ICU for intellectual stimulation and challenges, allowing them to grow and develop; even mentoring novice staff can also prove valuable for the RNs (Vincent et al., 2022). Solid and trustworthy leadership will support the staff during times of crisis. Norman et al. (2022) explained that leaders' communication is vital in such areas as rapid decision-making and the reliability of receiving needed supplies promptly, which also impacts the staff. Leaders should ask the staff what they need rather than assume they have the answers.

Another area that garnered significant attention is resilience and resilience training. Zenani et al. (2022) explained that resilience is a positive trait, and the more

resilient staff can better cope with the situation. Promoting resilience includes focusing on personal attributes, self-reflection, and building positive attitudes (Zenani et al., 2022). Additionally, peer support helps offer a sense of security, acknowledging that they are not alone. Zenani et al. also explained that further psychological support might be needed, possibly using mindfulness or cognitive behavioral therapy. Another evidence-based intervention for those staff in an emotional crisis is psychological first aid (PFA). For a staff member in an acute state of distress, PFA can help mitigate the situation while offering hope (Harvey, 2021). PFA, provided by specifically trained staff members, addresses the immediate needs and provides safety and comfort for the staff member in crisis (Harvey, 2021). The individual needs to know they are not alone.

Another potential tool used in some facilities is a Team Lavender (TL) program. Initially created in 2014, Barden (2021) explained that this program, named for the calming effects of the lavender plant, can offer support at any time of the day. Like PFA, TL fosters self-care and peer support, using active listening, guided imagery, possibly reiki, and aromatherapy (Barden, 2021). The TL response might be either reactive in times of immediate crisis or proactive in anticipation of a crisis to support the emotional well-being of the staff. Meehan et al. (2022) explained that the psychological impact of COVID-19 will continue for years and the need for attention is immediate. Additionally, Meehan et al. explained that previously used strategies are no longer effective, and efforts to find new solutions are vital to protect this vulnerable population. These authors recommend that healthcare policymakers designate mental health and well-being funding for the traumatized staff members, as the need may extend well into the future.

Summary

The history of burnout in the ICU is well established, whether within the United States or globally. However, the appearance of COVID-19 threw burnout into a new realm, challenging RNs and forcing them to reconsider many aspects of their lives and careers. The WHO declared both 2020 and 2021 the years of the nurse and midwife in an attempt to draw attention and honor to these dedicated professionals (Graber et al., 2021). Built on a foundation of caring, compassion, knowledge, and skill, RNs today continue to cherish the qualities of Florence Nightingale, more than 160 years ago, of courage and competence toward improving the patient's health (Graber et al., 2021). While they are still students, RNs begin to establish their professional identities. They will continue to evolve throughout their careers, from direct patient care to health-promoting activities and education or research (Graber et al., 2021). They continue to contribute throughout their professional lives.

Today, RNs are struggling across the globe. They are angry, as they feel no one hears their voices of concern. In her editorial article, Bourgault (2022) shared that national surveys reveal that RNs are exhausted, frustrated, and struggling with sleep disturbances and moral distress. As COVID-19 restrictions diminish throughout most communities, RNs continue to experience challenging and demanding work conditions, caring for high-acuity patients, often with unsafe RN-to-patient ratios. Bourgault also explained that RNs report working exorbitant amounts of overtime, witnessing high numbers of deaths, and feeling disrespected and undervalued. Many RNs feel angry and frustrated that they cannot deliver the quality care they believe the patients deserve to

achieve positive outcomes. Bourgault explained that ICU RNs continue to work in unhealthy environments that seem to worsen with time.

As the pandemic unfolded, RNs received hero status from many communities. People cheered for the staff in some areas as they arrived for their shifts. However, most nurses do not seek a hero's welcome; they simply want to come to work in a safe, well-staffed, and well-supplied unit. Bourgault (2022) explained that RNs are hard-working professionals. However, they deserve basic self-care activities, like lunch or a bathroom break during their shift, activities that are not always guaranteed in some units. They deserve respect for their professional status and fair compensation for their work. In many parts of the country, RNs work shift after shift in non-sustainable conditions.

The current care models will not last, as RNs cannot continue working at this pace. Bourgault (2022) feels that the current system requires a complete overhaul, beginning with communication and collaboration. Major system-wide changes take time, but Bourgault feels action must ensue to prevent the loss of more talented RNs. Many recently departing the nursing profession include older, more experienced ICU RNs, taking their years of expertise and critical thinking skills with them. Bourgault explained that those remaining would suffer this loss; therefore, health leaders must focus on new innovative efforts to improve safety and sustainability. Perhaps changing the current care models to reduce the RN workload and improve the working conditions might make a difference. Bourgault feels the most critical issue involves ensuring the RNs know that we hear their voices.

A legacy entail all that an individual offers to their profession, illuminating a path

for others to follow. Graber et al. (2021) explained that those pillars within the nursing profession offer valued contributions and profoundly touch the lives of those within their care. The legacy of the RN can significantly influence healthcare for many across the globe, impacting other health professionals (Graber et al., 2021). However, they cannot impact lives or influence the future when they suffer from burnout. If changes do not ensue, what will the nursing legacy be for the future? What will happen to the nursing profession if their voices go unheard?

In chapter 3, I illuminate the aspects of this hermeneutic phenomenological study of critical care RNs working in rural hospitals and caring for COVID-19 patients during all phases of the pandemic. Collectively, this helps address the previously identified gap in knowledge surrounding the plight of the rural hospital ICU RNs, underrepresented in previous literature. Incorporating self-efficacy and work-life balance theories, RNs shared their lived experiences during this challenging time. Likewise, aligning with previous work, this study identified implications for career longevity.

Chapter 3: Research Method

The purpose of this study was to explore the lived experiences of burnout, self-efficacy, and career longevity in ICU RNs who cared for COVID-19 patients in rural community hospitals. Through a phenomenological design, the nurses were given the opportunity to share their personal interpretation of what they experienced during the many phases of the COVID-19 pandemic. In addition, the RNs offered any feelings they had toward their profession and how these feelings evolved throughout the pandemic. As a result of these considerations, some of the RNs changed their thoughts surrounding their career longevity, which is important for them and the profession collectively. This research contributes data to help better understand the overall status of the critical care nursing workforce within the United States.

Within Chapter 3, I will share my research question and explain my rationale for using a phenomenological design for my project, followed by a discussion of my role as the researcher and understanding of my relationship with my participants. Then the methodology, population, recruiting methods, sample size, and specific population criteria will be discussed. Following these contributions, I will offer my instrumentation, interview questions, and planned data collection process—finally, a discussion of my data analysis process, trustworthiness, and ethical concerns. I will address my concerns about biases and potential ethical challenges encountered during my research.

Research Design and Rationale

Choosing the right research design is crucial when conducting a study. The right design can add value and credibility while revealing intricate details about the topic. The

lack of qualitative inquiry on the COVID-19 pandemic inspired me to pursue this research method to add more depth to the existing and future knowledge surrounding the details of the pandemic. Among the various forms of qualitative research, phenomenological design runs in concordance with the holistic philosophy of nursing (Santiago et al., 2020) and therefore supports the current study.

Introduced by Husserl, phenomenology represents a collective approach to philosophy and research designs (Kafle, 2011). Phenomenology specifically helps researchers study a specific phenomenon, as well as the meaning of that phenomenon to the individuals involved (Dibley et al., 2020). Likewise, phenomenology allows the researcher to examine the individual's perceptions of a phenomenon and the meaning of their human experience (Crowther & Thomson, 2020). Specifically, the hermeneutic phenomenological approach relies on the subjective experience of the individual or participant (Kafle, 2011). Using such an approach to examine the lived experience of ICU RNs caring for patients during the pandemic, I was able to gather the nurses' unique feelings and interpretations while mitigating potential biases or preconceived ideas.

When conducting a hermeneutic phenomenological study, the researcher must use due diligence in the interviewing process—constantly asking questions to ensure a complete understanding of the topic. This form of inquiry aims for a deeper and richer understanding, exposing what exists beneath the surface information (Crowther & Thomson, 2020). Hermeneutic phenomenological design can facilitate uncovering the deeper meaning of the experiences; however, the researcher must look at what might be unsaid throughout the interview (Suddick et al., 2020). A deeper explanation of the

hermeneutic phenomenological design reveals the hermeneutic circle, a concept that begins when the researcher chooses the topic and continues throughout the research process (Dibley et al., 2020). The hermeneutic circle represents the researcher's continuous dialogue between the previously known data and the newly discovered material surrounding the topic.

While engaged in the interview process, the researcher must also be cognizant of previous ideas or biases. One way to identify these ideas is through bracketing, during which the researcher isolates these concepts (Dibley et al., 2020). Bracketing empowers the researcher to identify any previously held knowledge or feelings about the subject of inquiry (Santiago et al., 2020). This re-examination forces the researcher to question their previous views and remain open to the new data obtained during the current study (Dibley et al.). Through self-reflection, the researcher evaluates their attitudes toward the topic and opens themselves to deeper and more authentic understanding (Crowther & Thomson, 2020). Reflexivity describes the ability to reflect on social dynamics' impact on our attitudes and preconceived ideas, potentially influencing our data collection.

For the current study, I used s hermeneutic phenomenological design and interviewed ICU RNs who cared for COVID-19 patients throughout all phases of the pandemic. My goal was to gather an understanding of how the RNs described their lived experiences throughout this challenging time. Many individuals outside this population may have an impression of what these experiences entailed; however, only those who lived the experience can honestly share that information. I conducted interviews to explore this phenomenon using the following research question as a guide: What is the

interpretation of the lived experiences of burnout, self-efficacy, and career longevity in ICU RNs who cared for COVID-19 patients in rural community hospitals?

Role of Researcher

The researcher holds some unique responsibilities within qualitative research and more so with phenomenological design. The researcher must hone interviewing skills, specifically astute listening, to ensure the participants feel heard and acknowledged. It is essential for the participant to feel at ease during the interviewing process to allow them to share details surrounding their lived experiences. A characteristic of the phenomenological research process involves the researcher's ability to empathize with the participant; empathy involves the researcher understanding the participant's situation versus offering emotional support only (Gair, 2012). In addition to empathizing with the participant, the researcher must create a trusting environment. During a phenomenological study, the participants share their personal and individual experiences surrounding the subject of investigation; therefore, they may fear retaliation from individuals within that environment, such as a supervisor. The fear of confidential information landing in the wrong place may hinder their willingness to participate (Dibley et al., 2020). The researcher must respect this concern and take steps to protect the participants' identities. In this current study, each participant received a study identity (RN1, RN2) and their names do not appear anywhere in the document.

During the interviewing process, the researcher must work to keep the narrative on track. The interview questions need to be direct and address the research question. If, during an interview, a participant veers off track, the researcher can acknowledge and

empathize with the participant; however, they need to redirect back to the topic of the study. Researchers are also responsible for ensuring that the participants fully understand the goals and limitations of the research (Nouvet et al., 2022). Such a scenario may present challenges for the researcher, as they desire to create positive social change with their project; it is vital that they stay on point and accurately collect and analyze the data.

Another responsibility of the researcher in all study forms is to check personal bias throughout the project. The researcher was interested in the topic before they began; therefore, they may have preconceived ideas or expectations concerning the potential outcome. As the project unfolds, the newly collected data may also impact the researcher and their collective biases. Using bracketing, the researcher can attempt to acknowledge and eliminate any judgments about the topic or aspects of the topic (Larsen & Adu, 2020). Further, during a research project, over-empathy may allow personal biases to manifest (Figley, 2002, as cited in Gair, 2012). During the interviews, I tried to be cognizant of my facial expressions and only offer comments while the participant shared their information if I needed clarity. Journaling during this process also allowed me to document my feelings and concerns. I frequently discussed concerns with my dissertation committee. While it may be impossible to eliminate all biases, attempting to do so can help add credibility to the research project. In addition, for this study, no participants that previously worked with the researcher were accepted to avoid biases or power relationships.

Methodology

Participant Selection Logic

One of the most important aspects of a qualitative study is appropriate sampling, as the population contributes to the study's outcome. For this hermeneutic phenomenological project, the participants had to meet all criteria, most significantly, their experience working with COVID-19 patients. Purposive sampling serves hermeneutic phenomenological design well, allowing the researcher to intentionally search for the individuals capable of addressing the research question (Dibley et al., 2020). I also attempted to find nurses of varying ages, genders, and geographic regions to add value and credibility to the data (Hu et al., 2021).

In the current project, I chose the following inclusion criteria.

- RNs working in ICU for two to three years or more before the start of the pandemic.
- RNs who continued to work in the ICU during all phases of the pandemic to the present time.
- RNs working in a rural hospital system, non-university affiliated facilities.

The rationale for these criteria stems from the desire to address experienced ICU RNs instead of new graduate RNs or those pulled into the ICU from other departments. The ICU environment requires specialized skills and knowledge that experienced ICU RNs possess. A recent graduate RN or an RN from a different department might not have these skills or knowledge; therefore, they may experience anxiety and possibly burnout, manifesting differently than the existing staff members. This study explored the burnout

of experienced ICU RNs with the knowledge, skills, and comfort level required for the role. Likewise, it excluded those who left the ICU environment during the pandemic. Many RNs left the ICU and some the field entirely during the pandemic for various reasons; these individuals may also have a story to tell, a potential subject for future research.

As stated, this study aimed to examine ICU nursing burnout specific to COVID-19; therefore, it was vital to begin with an ICU RN population that has established the skill set and knowledge base required of these nurses. The initial training phases for an RN new to the ICU are complex and overwhelming; therefore, I chose only to address experienced ICU staff members. The massive increase in ICU patients during the pandemic impacted all staff. However, the newer RNs will not possess the comfort level with the critical care procedures and treatment modalities required for these patients and will most likely struggle due to their lack of experience. The burnout they experienced may not indicate the general staff members; therefore, they were excluded from the current study. Future research could address the newer ICU RNs specifically and how they dealt with these new demands.

Initially, I planned to utilize the state nursing boards to recruit RNs for this study; however, after contacting 12 states, only one, the state of Alabama, agreed to assist with disseminating my recruitment flyer. Therefore, my revised plan entailed using social media, Facebook Groups, and LinkedIn to share an Institutional Review Board (IRB)-approved recruitment flyer. (Flyer appears in Appendix A) The flyer states the inclusion criteria and my contact information using my Walden University email for security. Once

the RNs contacted me, I verified the inclusion criteria via email by asking the potential participant questions about their RN experience and geographic area: rural versus metropolitan. Then, I explored possible variability criteria, such as a range of ages, genders, levels of education, and certifications, as well as geographic regions. The next step required the potential participant to sign and return the informed consent document, sent to them via email, and then I set up a Zoom meeting at a convenient time for the participant and researcher.

The use of a Zoom-type format increased during the pandemic. In many cases, RNs used various forms of virtual connection to assist their patients in communicating with families that could not visit, as well as speaking with their own families (Gonzalez-Soto et al., 2022). Therefore, many RNs feel comfortable using this format today, as it decreases the need for physical contact as well as the potential cost of a meeting in person and ultimately, vastly increases the potential participant pool. The participants were often in the comfort of their home during the interviews.

Likewise, the participants agreed to set aside a time slot of 30-60 minutes with no interruptions, such as pets or children. The researcher was able to assess the participant's body language and facial expressions during the interviews. Gonzalez-Soto et al. (2022) shared that the researcher can develop a better relationship with the participant through the virtual format, fostering respect, empathy, and trust and allowing the participant to reveal intricate details of their experiences.

Finally, seeking an adequate number of participants to create a viable research study remained a concern. Dibley et al. (2020) explained that data saturation does not

apply fully to hermeneutic phenomenological design. Data saturation implies the researcher does not find anything new with continued interviews. Within the hermeneutic phenomenological study, the challenges of reaching data saturation stem from the fact that not all participants will have the same experiences or may not want to disclose certain information about their experiences, according to Dibley et al. Further, Dibley et al. explained the goal of the researcher is to aim for completeness: Do the analyzed interviews offer sufficient data to satisfy the research question? Within the current study, I evaluated each interview and assessed the contribution each added to the total picture and determined if I adequately answered the research question. My goal involved at least eight to ten participants in the study.

There were no plans to offer any financial rewards for the participants of this study. Participation is strictly voluntary. However, upon completing the interviews, I offered the participant a choice of an Amazon or Starbucks gift card for $10 as a token of my appreciation.

Instrumentation

One unique aspect of qualitative analysis is the role of the researcher in data collection. While the quantitative analysis may use surveys or specific tools to gather information from the participants, qualitative design requires more input from the researcher. Yoon and Uliassi (2022) explained that the researcher is the instrument or tool within qualitative, responsible for all data collected through the interview process, data analysis, and the final report of the findings. Collectively, the researcher can influence the study's outcome through their presentation of the interview questions and their demeanor

during the interview. The researcher can help the participant feel at ease and comfortable sharing their personal experiences concerning the topic of the study. Yoon and Uliassi further explain this vital role is complex and will influence all aspects of the research.

Placing more responsibility on the researcher in qualitative design also comes with increased demands as well. When the researcher is the instrument or tool, they must be mindful of any cultural or social biases that may influence the outcome. Yoon and Uliassi (2022) also explained that such influences could draw attention away from the true intentions of the participants. Within the current research study, my background as an ICU RN could have influenced my interpretation of the data; therefore, I needed to be aware of my role as the instrument in this study.

The interviews for this study were recorded via Zoom and a backup tape recorder; likewise, these tools might qualify as instrumentation to facilitate the investigation. In addition, the researcher used an interview guide (Available in Appendix B). The interview questions directly addressed the research question; therefore, if the researcher was able to keep the interviews on track, the data completion point, therefore illuminated easily.

Data Collection Procedures

Upon IRB approval, I began recruiting RNs using the approved flyer and disseminating it within the nursing Facebook groups, and LinkedIn. I continued sharing the approved flyer throughout various Facebook Nursing groups and shared with fellow RNs via email. Once I received email contact from potential participants, I assessed the inclusion criteria and then sent them the informed consent document. Once they signed

and returned their consent forms, I scheduled the Zoom interviews for each participant. Six participants were not in their work setting for the interviews but in a comfortable environment where they could remain uninterrupted and relaxed for the session. One RN was at work but in a separate room, during her lunch break. The sessions averaged 25 minutes. The frequency of the interviews depended on the availability of the participants to schedule the interviews. The duration of the data collection was approximately one month. Once enough participants completed the interview process to answer the research question; the process ended.

My interview questions are in Appendix B. I asked the questions and allowed the nurses to share as they wished. I avoided interrupting them as much as possible, and only if I needed clarification on a point or if I couldn't hear something they said. Also, I wanted to be mindful of my facial expressions throughout the interviews to prevent influencing the participants while sharing their information.

Using the Zoom format, I recorded each interview through the platform, which also allows for secure storage. In addition to the Zoom recording, I used a tape recorder to ensure I did not miss any data or, if any technical issues arose. Following each interview, I transcribed the data manually. Upon completing each transcription, I emailed a copy to the participant for verification and authenticity.

Any subject has the potential to trigger an emotional response in some individuals; however, some might have a more significant impact. Such responses as anger, anxiety, or sadness may result from discussing various topics and therefore require caution on the part of the researcher to protect the participant (Dempsey et al., 2016). The

participant may fear a breach of confidentiality or that the questioning is an invasion of privacy or touches on uncomfortable details, sparking anxiety. Likewise, the hermeneutic phenomenological research design seeks in-depth information about the topic; therefore, the researcher must be conscious of these potential concerns for the participant. The intricate details of the RN's experiences during the height of the pandemic might develop an emotional response triggered by these discussions. Participants were informed that they could stop the interview at any time and withdraw from the study.

The face-to-face interview, even via Zoom, allows the researcher to observe body language and collective reactions to the interview questions. However, the participant may develop concerns, fearing that personal or private information may reach a supervisor or administrator of their work facility (Dempsey et al., 2016). It is vital that the participant feels comfortable with the researcher and develops trust to allow the sharing of in-depth details of their experiences. Likewise, this helps to produce a richer, more robust study and sheds light on these experiences. Dempsey et al. explained that the researcher must assess potential risks to the participant and ensure they adhere to the mandates observed in the code of ethics. There are no requirements for follow-up for the participants. Once they reviewed the transcripts of their interviews and verified the data, they exited the study. A link can be emailed if they would like to receive a copy of the final draft.

Participant Recruitment

Participant recruitment involved using social media, Facebook Groups, and LinkedIn to share an IRB-approved recruitment flyer. (Flyer appears in Appendix A) The

flyer stated the inclusion criteria and contact information. Once the RNs responded and the inclusion criteria verified via email, I asked the potential participants questions about their RN experience and geographic area: rural versus metropolitan. Following this step, I evaluated possible variability criteria, such as age, gender, levels of education, and certifications, as well as geographic regions. The next step required the potential participant to sign and return the informed consent document, sent to them via email, and then I set up the Zoom meetings at convenient times for the participant and researcher.

Data Analysis Plan

Upon completion of all interviews and transcriptions, I emailed the transcripts to each participant for verification and validation of the material. For the participants with concerns with the transcript, I made appropriate modifications. Transcriptions must be as thorough as possible, including non-verbal communication as well. Following the guidelines of Hycner (1985), I then needed to reread all transcripts from start to finish with complete openness, bracketing my presuppositions. Hycner explained that bracketing and phenomenological reduction empower the researcher to isolate their preconceived ideas or thoughts and fully engage in the emerging data. Likewise, the researcher will be able to identify the true meaning of the phenomenon of inquiry.

When analyzing qualitative data, Dibley et al. (2020) explained that the researcher must reread the transcripts, line by line, and relisten to the recordings multiple times to engage in the material thoroughly. The initial coding process begins when the researcher observes the emerging themes or patterns in the transcripts. The goal of phenomenological design is to uncover the true meaning behind the participant's

experience; therefore, this phase of the analysis process is critical. Likewise, bracketing is essential to ensure an accurate interpretation of the material. I did not use data analysis software.

When reviewing the material, the researcher searches for units of general meaning that begin to emerge. Hycner (1985) explained that the researcher needs to evaluate the transcripts, reviewing every word or phrase and searching for the participant's meaning. The goal here is to search for the phenomenon's authenticity, suspending my own ideas. At this point, I needed to check my own views, avoiding my personal interpretations and remaining true to the words of the participants. The next phase involved identifying units of general meaning that address the research question. Hycner identified these as the units of relevant meaning upon which the researcher begins to cluster together, illuminating themes.

Once the themes become evident, the researcher may formulate an interpretive summary, conceptualizing the relevant themes. Dibley et al. (2020) explained that the researcher must include as much detail as necessary to articulate the participant's story. Ultimately, the goal is to generate a thought-inspiring rendition of the narrative and convey a deeper understanding of the participants' lived experiences. Likewise, this process may illuminate deep and rich interpretations of previously unexplored phenomena.

Upon completion of the data analysis and, likewise, the collective document, data storage for this study was initially on a secure home computer. Later, all tapes and files will be stored in a fireproof storage unit. This unit will be secured in my home office for

the required five-year period.

Treatment of Discrepant Cases

The nature of the current project involved highly personal experiences; therefore, potential discrepant cases did not manifest. This study aimed to examine the RNs' life experiences and their interpretations of the events as they wish to describe them. Likewise, each interviewee was given equal respect during the analysis. If I encountered any concerns, I consulted my committee.

Issues of Trustworthiness

Much of qualitative inquiry relies on subjective data analysis; therefore, the reader must have the opportunity to garner trust in the study presentation. The study's rigor is the degree to which the researcher adheres to quality research standards, which helps build trust (Dibley et al., 2020). Essentially, the researcher's goal should entail strict compliance with the expectations of sound research practices. Dibley et al. explained that the study's validity describes the degree to which the study produces the intended results, answering the research question. While the reliability represents the likelihood that the study's replication could produce the same or similar results. Finally, Dibley et al. explained that the generalizability of a study indicates the ability to apply, with confidence, the current results to another population with similar characteristics.

The rigor of a study can be assessed through the trustworthiness, credibility, dependability, and transferability efforts the researcher demonstrates within the project. Within a hermeneutic phenomenological study, the goal involves revealing an in-depth understanding of the human experience shared by the participants. Therefore, the

trustworthiness of the evaluation describes the level of confidence the reader may generate concerning the study process and, likewise, the results. Dibley et al. (2020) also explained that transparency could greatly enhance trustworthiness by disclosing potential biases, not simply stating the issue but providing evidence as well. Therefore, I must reveal any biases or challenges that arise during the research process for the current study.

Credibility

The integrity that the researcher demonstrates throughout the research process will lend itself to establishing credibility for the study. Within qualitative research, the participants share information during recorded interviews that the researcher must transcribe verbatim. Therefore, once the researcher completes the transcription of the dialogue, sending a copy to the participant for verification will help establish credibility as the participant can confirm the authenticity of the data. Dibley et al. (2020) also explained the importance of the researcher maintaining strict and complete audit records of all communication with the participants, as well as committee discussion of the process. Within the current study, RNs shared personal experiences of caring for COVID-19 patients; therefore, the credibility of the results strictly connects with the accuracy of the data collected during the interviews. Thus, accurately representing the participant's experiences and using participant verification will help establish credibility.

Transferability

Once the study is complete, can the researcher apply the results to another population with similar characteristics? This concept describes the transferability of the

study, as explained by Dibley et al. (2020). While the experiences of individuals hold unique details, complete and transparent descriptions of the interview environments, the participants and the data analysis process will help support the potential transferability of the study. The researcher must strive for balance, openness, and transparency throughout the study. Given the sensitive nature of the material or information the RNs shared, my study could present challenges; however, a rich and thorough description of all details of the experiences will help establish transferability. My adherence to strict audit trails will be vital.

Dependability

Essentially, the study's dependability refers to reliability; basically, can researchers replicate the research and obtain the same or similar outcomes? Within the current study, I sought RNs who worked in the ICU and cared for COVID-19 patients throughout all phases of the crisis. I also searched for nurses from rural health systems within the United States. Sharing details of my study design should allow future researchers to obtain similar outcomes; however, all individuals have different experiences, and their interpretations will also differ. Dibley et al. (2020) explained that within a qualitative design, the goal should not be seeking the same results but instead results that resonate with the original studies. While dependability may prove difficult to establish, Dibley et al. explained that the researcher should provide clear audit trails and thorough explanations of all decisions. Therefore, I maintained strict audit records throughout all phases of my research to meet this requirement.

Confirmability

Demonstrating the confirmability of the study requires the researcher to ensure that the results manifest from the data and not from any preconceived ideas. Dibley et al. (2020) explained that the researcher must offer a vigorous description of the data collection and analysis process, disclosure of biases, and verbatim quotes from raw data, supporting the interpretations within the analysis process. Ensuring that my participants verified the transcripts of their interviews helped establish the initial phase of confirmability. Also, working closely with my committee and journaling throughout this process helped me assess the progress of my study. Once again, strict adherence to researcher protocols, accurate records, and constant checks for researcher bias helped support confirmability within this study.

Ethical Concerns

When conducting research involving human subjects, the researcher must adhere to strict ethical standards set forth as a result of atrocities committed in the name of research decades ago. Dibley et al. (2020) described one source of ethical standards for research as the Nuremberg Code, developed in 1947, originating from the trials of the Nazi physicians and their horrific treatment of prisoners. Some resulting concepts include respect for human dignity, honesty, transparency, and more, but informed consent ranks among one of the more essential concepts. More recently, the American Psychological Association (APA, 2017) set forth an accepted and respected code of conduct, offering strict guidelines for those working with or conducting research on human subjects. According to the APA, researchers must consider actions in terms of beneficence, doing

good, nonmaleficence, doing no harm as cornerstones of their behaviors. The APA also provided a thorough list of principles designed to answer potential ethical questions when dealing with human subjects.

When gathering data from human subjects, the researcher has an ethical responsibility to protect the participants. As I consider my current research project, several APA (2017) guidelines appear relevant. Initially, APA 8.01 describes the need for institutional approval (IRB) to engage with human subjects. The researcher must ensure they follow the requirements set forth by the IRB, meeting all demands. The following concepts, APA 3.10 and 8.02 discuss informed consent. All human subjects must sign a consent form before participating in the research project, acknowledging their understanding of the purpose of the study, procedures, their right to quit the study at any time, any potential risks associated with participation, and who to contact if they have questions. The informed consent process allows the participant to ask questions and ensure they understand what the study will entail before they begin.

Several other guidelines could have impacted my study. APA 3.06 describes a potential conflict of interest with my research (APA, 2017). My background includes working as an ICU RN during the initial phases of the COVID-19 pandemic; therefore, I needed to be mindful of my potential biases. One way to address this concern was when seeking participants; I did not include any nurses I previously worked with or institutions within which I formally worked. The next area of concern involved APA 2.01, boundaries of competence, and APA 3.04, avoiding harm. During my interviewing process, I asked RNs to share potentially sensitive information about their experiences

caring for COVID-19 patients. I needed to be aware of the potential impact on these RNs and ensure they know they could end their participation at any time but can also seek emotional support if needed. Although I would not abandon a participant needing help, I am not qualified to provide therapeutic intervention and must, therefore, acknowledge my boundaries.

Maintaining ethical integrity throughout a research project is vital, but adhering to the philosophical structure of the research design also holds some merit. Hassan (2022) explained that researchers need to appreciate the appropriate focus of a phenomenological method, as the goal involves seeking a deep understanding of the essence of the participant's experiences. Further, Hassan explained that some researchers attempt to use a scientific approach, as opposed to a philosophical one, as Husserl intended. The use of bracketing may help the researcher suspend some of their previous ideologies or prior judgments surrounding the topic, allowing the true essence of the experiences to emerge. Essentially, when we read the participant's explanations of their experiences, can we understand what they felt? My goal was to attempt to stay true to the essence of hermeneutic phenomenological philosophy and gather this in-depth understanding of their experiences.

Summary

Throughout Chapter 3, I shared my research plan to conduct a hermeneutic phenomenological study of ICU RNs who cared for COVID-19 patients and their concerns about career longevity. This was followed by a discussion of the role of the researcher and the importance of empathy and trust to enable the participant to feel at

ease, facilitating a richer, more in-depth interview. I also shared the inclusion criteria, rationale, interview strategy, and data collection and analysis methods. Finally, I discussed my concerns about trustworthiness and ethical issues within a hermeneutic phenomenological design.

In Chapter 4, I will present the study's research findings, sharing the interview and analysis results. In addition, Chapter 4 includes details about my participants' variability information and the experiences they offered, as well as details of the interviewing process and the environments for each. The data analysis, coding methods and results will also be discussed. Finally, I will address credibility, transferability, and confirmability.

Chapter 4: Results

This hermeneutic phenomenological research project was conducted to explore the lived experiences of ICU RNs who cared for COVID-19 patients during all phases of the pandemic in rural hospital systems in the United States. The interview process facilitated the ICU RNs' self-reported burnout status and how their self-efficacy influenced their functionality and, ultimately, their career longevity. The following research question guided the interview process: What is the interpretation of the lived experiences of burnout, self-efficacy, and career longevity in ICU RNs who cared for COVID-19 patients in rural community hospitals? This research identified unique aspects of these experiences and how to improve the situation in preparation for future pandemics. The rural community hospitals and their staff members struggled in unique ways. The resources and education available are different in the rural setting compared to the urban or university-based facilities; therefore, understanding what these nurses endured can help shed light on potential solutions. Additionally, exploring how these nurses feel about their careers after the pandemic revealed a dramatic shift, many wishing to shorten their careers significantly.

Throughout Chapter 4, I will discuss the setting, demographics of the participants, data collection and analysis, evidence of trustworthiness, the results, themes, and subthemes. I further discuss the unique aspects of the Paradise, California Camp Fire of 2018 and its impact on citizens, especially the RNs caring for COVID-19 patients after their exposure to the Camp Fire. Finally, I specifically address burnout and career longevity of the study participants, and what changes manifested as a result of the

pandemic.

Setting

Upon recruiting each RN, I asked them to choose a time to allow them to speak freely and answer the interview questions without concern for anyone else to witness the information they shared. Seven RNs participated in the study; six agreed to times when they were at home and without any potential interruptions. One RN did her interview while on her lunch break at work, but she was able to enter a room that allowed her privacy during the discussion. Each interviewee displayed a level of anxiety toward the subject matter, and five RNs became emotional during the interviews. Conducting the interviews in private, without interruptions, allowed them to speak freely and share personal feelings, experiences, and areas of concern toward their hospital, government, or community collectively.

Each of the RNs worked in a rural community hospital, allowing them to share the challenges those working in these facilities faced. While many organizations struggled with a lack of resources, the rural community hospitals faced unique challenges, as skills, education, and financial statuses differed. These nurses shared what they experienced and their views of what could have been done differently.

The Zoom platform allowed me to tap into a larger population pool, reaching RNs nationwide. Otherwise, attempting to meet face-to-face would be almost impossible or quite expensive. During the pandemic, many RNs became comfortable with the Zoom platform and had no problem with Zoom interviews for this study. Each interview touched on emotional triggers from the height of the pandemic. I was concerned that I

might be unable to comfort them should they react negatively to the interview questions. However, each RN displayed honesty and professionalism. I have also kept in touch to ensure they know they have a friendly person to talk with if needed.

Demographics

The participants for this study consisted of seven ICU RNs from various parts of the United States. The initial inclusion criteria were:

- RNs working in ICU for 2 to 3 years or more before the start of the pandemic to ensure sufficient expertise in critical care.
- RNs who continued to work in the ICU during all phases of the pandemic to the present time.
- RNs working in a rural hospital system, non-university affiliated facilities.

As I began recruiting ICU RNs, I learned of another population I previously omitted, which might prove valuable to my project. This group included those ICU RNs who contracted COVID-19 or another illness that forced them to leave bedside nursing prematurely. Therefore, I submitted a request to amend my criteria to the IRB and received approval on January 2, 2024, to include the following as additional inclusion criterion: RNs forced out of clinical practice due to health issues, such as contracting COVID-19. This helped, as RN #5 fell under this qualification, contracting COVID-19 herself, as well as her entire family, most notably, her son, who was critically ill.

During the initial phases of my preparation for this study, I contacted state nursing boards from 12 states with dismal results, most not even taking my calls. Only one state, Alabama, offered to help disseminate my flyer. However, when re-contacted, the legal

team expressed concern. The Alabama Board of Nursing (ABN) acknowledged the value of the study; however, they did not wish to disseminate the flyer. The legal team felt the study could shed a negative light on the care given within the state. However, the ABN has invited me to present the findings of this study at a future board meeting.

The recruitment process included sending my flyer on social media, including LinkedIn and Facebook. Initially, the nursing Facebook groups denied access to my flyer, stating the need for administrative approval. I then sent my flyer via general Facebook, requesting all my friends to repost it, which they did; likewise, they sent it across the United States within 24 hours. I also contacted fellow ICU RNs from around the country via email and asked them to share the flyer in any rural hospital settings that might be appropriate. As a result, Facebook produced two RNs, and friend referrals produced five more ICU RNs.

Only the recruitment flyer appeared on Facebook, which the RNs used to gain access to my university email. No personal information from the participants appeared on social media from my study. Upon contacting me and verifying the inclusion criteria, I emailed the consent to the RNs. All returned the consent quickly; ICU RNs deal with consents for patients, almost daily, so they all understood the process.

The final breakdown of participants included seven ICU RNs, each having more than 15 years of ICU experience, and all but one worked through all phases of the COVID-19 pandemic. The only ICU RN to leave the bedside was RN #5, who contracted COVID-19. Two RNs currently live and work in a community hospital in North Carolina, but one of those RNs worked in a rural hospital in Michigan before moving to North

Carolina. Four ICU RNs participating in this study live and work in a community hospital in Hawaii, on the island of O'ahu. One of the RNs currently lives in California and formerly worked at Feather River, the community hospital in Paradise, California. A fire destroyed that hospital during the devastating Camp Fire on November 8, 2018, forcing all citizens to move to new locations, adding to the challenges these RNs faced during the pandemic (Hamideh et al., 2021).

A breakdown of the participants' age, years of experience, and education appears in Table 1. All participants were female. Two of the seven have certifications as critical care RNs (CCRNs), and all but one had a BSN or higher level of education. In addition, five of the RNs were Caucasian and two were Asian. All of these RNs provided direct patient care in the ICU setting, working at least 12-hour shifts, all reported doing overtime frequently, to help cover the needs. RN #3 reported caring for three ICU patients "99% of the time, if not 100%." The standard ICU RN-to-patient ratio is one RN to one or two patients.

Table 1

Demographics

Participants	Age	Years as RN	Years in ICU	CCRN	Education
RN #1	65	46	46	Yes	ADN
RN #2	54	30	25	Yes	BSN
RN #3	54	25	22	No	BSN
RN #4	50	26	18	No	BSN
RN #5	50	17	17	No	MBA
RN #6	65	36	34	No	MSN
RN #7	53	25	23	No	BSN

The RNs were all 50 years or older, with over 15 years of experience as an RN, and most of their careers were in critical care. Likewise, each RN was comfortable with ICU-level care, assessments, skills, and operating equipment for this patient population. Each RN has cared for ICU patients requiring complex critical care procedures, such as CRRT or ventilator support. Therefore, each met the criteria for this study. More diversity in the participant pool might have offered a further evaluation of the perspectives of ICU RNs in rural hospitals. For example, younger RNs or male nurses might give more insight into their experiences. In addition, more participants and representation from more states might expand the knowledge and description of experiences to enhance this study.

Data Collection

Data collection for this hermeneutic phenomenological study involved interviewing seven RNs, each of whom worked in critical care during the COVID-19 pandemic. Once the RNs responded to my flyer, I verified their eligibility and obtained consent via email. The IRB-approved consent offered the study's purpose, explaining that participation was voluntary and they could withdraw at any time during the process. Upon receipt of consent, I set up and conducted one-time interviews via Zoom. The interviews were recorded through the Zoom platform and on a separate tape recorder. This was a valuable decision, as approximately 17 minutes of the first interview was not captured via Zoom. Therefore, the entire interview was preserved via the tape. The average interview time was approximately 25 minutes, with the longest interview being 45 minutes.

Upon meeting each RN in the Zoom setting, I introduced myself. I then explained that I would avoid identifying information during the interviews, using only RN # X to protect the participants' privacy. I then proceeded with the semi structured interview questions (Appendix B), allowing each RN to tell her story uninterrupted. The first question directly aligned with the research question guiding this study, exploring the lived experiences of ICU RNs during the pandemic. The second question allowed the RNs to state what they observed, felt, or believed about the events of the pandemic and how each intervention impacted them at the front. Many individuals on the outside may think they know what the nurses need to do their jobs, but only the RNs lived it and only they can illuminate their needs. Because the purpose of the project was also to assess the burnout of these nurses, the third question addressed this topic. Finally, the fourth question addressed career longevity. Each RN described their experiences and the progression through the many waves or mutations of the virus. During the interview process, several seemed worried they were off tangent or not answering the questions appropriately. As stated, some became tearful, and some began to speak faster when discussing some of the specifics of caring for COVID-19 patients. As a token of my appreciation for their time and courage in sharing their stories, I offered each RN a $10 gift card, from their choice of either Starbucks or Amazon.

There were no variations in the data collection process. I maintained the same routine for each RN. The only challenging or unusual condition was the section of the first interview that did not record. After that incident, I double-checked at the start of each successive interview.

Data Analysis

I used Hycner's (1985) analysis guidelines to facilitate the data analysis process for this hermeneutic phenomenological study. Upon initiating the data collection process, I ensured that I maintained a clear mind by bracketing and using phenomenological reduction through journaling. To accomplish this task, I assessed my own views toward the bedside ICU RN role and ensured that I kept checking on that connection by journaling my thoughts before each interview and using music to help me stay calm and clear minded. I remained a diligent and attentive listener with each interview, focusing on what the RNs shared. Incidentally, I found that my concern for the RNs, as they shared their traumatizing experiences, allowed me to stay focused on them and keep my past experiences out of the process. Because I am an ICU RN with many years of experience, I was able to relate to what they were describing but was also able to allow them to share. In addition, I ended my work as a bedside ICU RN in December 2020. As a result, I could remove myself from the constant exposure to the challenges faced by these RNs, allowing myself to carry fewer potential biases as I listened to the participants share their stories. I also limited my contact with old friends in the ICU or only discussed non-work topics. Likewise, I have not heard about what they have been going through over the years since I left. This process allowed me to listen to the fresh information from my participants, while mitigating potential biases. I believe the RNs felt they were speaking to a colleague, and they appeared comfortable sharing their stories.

During the interview process, each RN was allowed to speak freely, answer the questions, and fill in any blanks about their experiences during this challenging time in

their careers. They often felt or expressed concern that they were "off tangent" as they spoke, and emotions frequently influenced responses. Hycner (1985) advised that to gather a true sense of the interview, the researcher should repeatedly listen to the recordings of the interviews and reread the transcripts. I hand-transcribed the interviews, repeatedly listening to each segment to ensure accuracy. Although the process was time-consuming, I felt I needed to use this method for confidence in the data collected. I also relistened to the recordings and reread the transcripts, reviewing the data offered by each RN, and as a result, I gained a rich understanding of their messages (see Dibley et al., 2020).

Various themes quickly emerged from the recordings during transcription. With each interview, the RNs shared similar experiences and critical concepts repeated in all or most of the interviews—emotional responses manifested with some of these concepts, as well. By listening to each interview multiple times, I could identify and cluster common ideas that I could gather into units of relevant meaning. As Hycner described, clustering units of relevant meaning and identifying themes required diligent assessment of the recordings and rereading the transcripts. Also, seeking guidance from my dissertation committee helped me understand what was needed to complete this task.

Upon completing the transcripts, I emailed a copy to each participant to verify the details. I asked the RNs to please check each transcript's accuracy and let me know what needed to be adjusted. Two RNs requested minor adjustments, which clarified data but did not alter the themes. I made the minor adjustments the participants asked, indicating zero discrepancies in the transcripts at present. The emerging themes allowed me to

identify codes from the RN's experiences. These themes included a sense of duty, as displayed by statements like, "It was like we were in combat. I tried to see myself as a soldier." The second theme identified was fear, with comments such as, "It was scary! It was super scary. Um, yeah, it was just really scary!" The next theme was the lack of preparedness, explained through comments such as, "The hospital ran out of oxygen!" And finally, psychological stress/moral distress, as described through comments such as, "I would leave work in tears many days!" While identifying themes, I struggled with consistency and sought assistance from my dissertation chair.

Upon completing the transcripts, I began analyzing the data obtained during these interviews. As I listened to each interview and looked through the transcripts, I isolated units of general meaning that stood out. An example was RN #1, who shared information concerning her hospital running out of oxygen during the early phases of the pandemic. Another participant, RN #5, explained that the nurses had to sterilize and reuse their N95 masks and how she felt it was "disgusting." Clustering these ideas while assessing the research question identified part of their lived experience and collectively indicated a lack of preparedness. Likewise, that theme emerged. The same was true for the RNs expressing a sense of duty, fear, and psychological stress/moral distress.

This study involved seeking ICU RNs to share their experiences during the many phases of the pandemic. Therefore, the goal only entailed exploring their descriptions of those lived experiences, not seeking opposing ideas; thus, this study had no discrepant cases.

Evidence of Trustworthiness

The trustworthiness of a research project directly reflects the researcher's rigor, essentially, how well they adhered to academic research standards. Did the researcher properly obtain data following sound research protocols to address the research question? Within the qualitative design, the researcher's goal is to delve into the human experiences offered by each participant. Therefore, the trustworthiness of the research process is vital to the study's credibility, transferability, dependability, and confirmability.

Credibility

Enhancing credibility is vital to the value of a research project. For this project, I sought ICU RNs from across the United States and successfully recruited nurses from three states: North Carolina, California, and Hawaii. To address the triangulation of the study, I compared the data obtained from the nurses in each of these states. All seven RNs expressed a sense of duty, as this is the job, and we all took an oath to serve. All seven RNs voiced concern for the number of deaths they observed and the fear they felt for their own safety and that of their families. All expressed some concern about the lack of preparedness in all states. Four of the seven RNs felt the travelers appeared detached or unprofessional, and three of the seven expressed dissatisfaction surrounding the virtual rounds conducted by physicians in their hospitals.

One RN, the California participant, shared a unique view of her work during the pandemic. Her community had suffered a devastating fire a year and a half before COVID-19 hit. This RN shared many of the same concerns as the other participants but with added challenges based on the recent fire. Many of the patients in her hospital

succumbed to COVID-19 faster because of the residual lung damage from the fire. Likewise, this added an additional layer of stress for the RNs in her hospital.

One interesting observation concerned the support the RNs felt they had from the government or their administration. While several RNs felt the administration "had our backs," others stated their administration had no idea what the RN's role entailed and, likewise, made poor, non-supportive decisions. Some commented that the government did its best, while others felt it could have sent more manpower.

Additionally, my background and experience as an ICU RN may have placed a layer of comfort or trust in these RNs. Because I could relate to what they described and I have worked for many years as an ICU RN, I had a slightly deeper understanding of the experiences that they shared with me. They shared with a colleague versus an outsider, who may not have fully understood. I did feel that everyone saw me as a researcher, and I felt they respected the process. In addition, I asked each RN to please read and verify the transcripts to ensure my accuracy of transcription. Only two requested minor adjustments.

Transferability

All seven RNs worked in community hospitals within the United States. The patient population included members of the surrounding geographic regions of all ages. The collective group of RNs had 15 years or more of ICU experience and all were 50 years or older. All RNs shared their comfort level with ICU patient care skill sets, including assessments, medications, ventilators, CRRT, and more. Two RNs had their certification as critical care RNs (CCRN), and all but one RN had a BSN or higher level

of education. All but one worked at the bedside throughout all the pandemic phases, providing direct patient care, including the necessary procedures. Only one RN left bedside nursing after she and her family contracted COVID-19.

One factor that might impact transferability is that four of the seven were from the state of Hawaii. Although these four RNs offered rich data to contribute to the study, more diversity might add more depth. A larger sample from across the country might contribute to a more considerable exposure to the challenges RNs faced in other parts of the country. Collectively, more participants from any state could further enhance the transferability of this study. In addition, exploring the experiences of long-time ICU RNs who left bedside during the pandemic might also add new insight.

Dependability

Upon receiving IRB approval, I shared my flyer across social media, Facebook, LinkedIn, and general emailing to RNs nationwide. I maintained a journal, documenting my process as an audit of my progress. As potential participants contacted me, I verified eligibility, obtained consent, and conducted Zoom interviews. Each interview was double recorded, using Zoom and a tape recorder. I only encountered a challenge with the recording of the first interview. I discovered the Zoom recording was not correctly activated, but the tape recorder was functioning perfectly and captured the entire interview.

Transcribing the interviews was a slow and tedious process. I did not use any software assistance; I just watched & listened to the recordings, one section at a time, while typing. Once I transcribed the interviews and reviewed them three times each, I

then emailed a copy to the participant for verification. I made the necessary corrections as they reported back to me. (Only two RNs requested minor adjustments.) I then analyzed the data, using Hycner's guidelines, obtaining units of general meaning and then identifying themes across the interviews.

Confirmability

While I do have a 46-year history of nursing, most of which was in critical care, I did step away from the bedside in December 2020. I worked during the first and part of the second waves of COVID-19. The time since I left bedside has allowed me to clear my head of the preconceived ideas and biases, I had during my work time. I am also aware of this potential resurfacing of prejudice and, therefore, the need to self-check through journaling. In addition, I communicated with my dissertation chair frequently to ensure that I adhered to all research protocols.

As I conducted each interview, I made great efforts to remain neutral and listen openly as each RN shared their experiences. Some statements by the RNs did spark some memories and even some emotional responses, but for the most part, I achieved neutrality by mitigating my previous feelings and tried to focus on the fact that these are their lived experiences, not mine. As each interview progressed, I focused on ensuring they could speak as freely as needed, not interrupting their stories. Also, my concern for the RNs and the level of emotional distress these interviews might trigger allowed me to stay focused on them rather than my background.

Collectively, these RNs offered a clear picture of their lived experiences during the many phases of the pandemic. However, the sample is small, with only seven RNs

from three states. More RNs from more states could add richness to the study. Additionally, all seven RNs were 50 or older, eliminating the younger RN population. Hearing from this group could add richness to the results, as well.

Results

To complete this qualitative inquiry, I recruited RNs from across the United States, with seven responding to either my flyer or being referred by a fellow RN. Within this current study, the RNs answered the interview questions and offered depth and richness, illuminating specific themes. Throughout the interviews, themes consistent with the literature arose from this participant pool. Each RN shared their unique perspective but supported common themes such as a sense of duty, fear, lack of preparedness, and psychological stress/moral distress. While more participants from across the country would undoubtedly add more depth to the data collected, this participant pool offered compelling material to address the research question, achieving completeness. Each RN offered details surrounding their experiences during the early phases of the pandemic. The RNs provided specific examples of incidents and their feeling surrounding these events, ultimately contributing to the final data and addressing the research question: What is the interpretation of the lived experiences of burnout, self-efficacy, and career longevity in ICU RNs who cared for COVID-19 patients in rural community hospitals?

The interview themes appear in Table 2, and a complete discussion follows.

Table 2

Themes

Themes	Sense of Duty	Fear	Not Prepared	Psychological Stress/Moral Distress
Subtheme 1	• We took an oath. • This is the job-it's what we do!	• More death than ever seen • Large # of body bags	• Infrastructure-no anterooms or staff showers	• Staffing
Subtheme 2	• Younger RNs- "I didn't sign up for this!"	• Fear for family's safety	• Supplies-poor quality or not enough- PPE, ventilators	• Administration did not check on staff
Subtheme 3	• Travelers-detached • Making high pay.	• Fear for own safety-poor quality PPE	• Staffing-not enough qualified staff	• No psych support/no debriefing • Felt devalued
Subtheme 4	• Felt like a soldier on the battlefield.		• Education	• Long-term impact of dealing with death & irate families

With each interview, I allowed the RNs the freedom to speak openly about their experiences caring for COVID-19 patients during the pandemic. Many covered the details easily, but I used the interview questions to ensure they were thorough with the information they provided. As I listened to each interview and the recordings, I felt overwhelmingly that the RNs expressed a deep sense of duty, as though they were answering the call to care for those stricken. Therefore, the first theme will address the nurses' sense of duty and the subsequent subthemes as they emerged.

Theme 1: Sense of Duty

As the interviews began, several RNs stated they felt driven to step up and care for the patients, answering the call. Because these RNs live and work in their community,

they often cared for patients they knew personally. Likewise, this added increased stress and a sense of duty to serve these individuals. RN #1 shared that her hospital had the RNs working mandatory overtime to help cover the staffing needs, and many RNs came out of retirement to help out, showing a sense of duty even from those who left the profession. She said, "Everyone was on board." She said she felt terrible for her coworkers who continued to care for COVID-19 patients even though their own family members were stricken with COVID-19 and some succumbed to the virus in other hospitals.

Subtheme 1: We Took an Oath

Several RNs commented on their sense of commitment to their patients and their role as ICU RNs. RN #5 stated, "We took an oath and became licensed RNs. We need to take care of these patients." RN #4 said, "You just don't leave the patient's bedside if they need you. I do it out of love and I care about the patients. We put our patients first. I am honored to work with great RNs who also care for their patients." Often, these RNs worked long, grueling shifts and overtime almost weekly.

Subtheme #2: The Younger RNs not Handling the Demands

The collective group of participants were all 50 or above. Several RNs had concerns about some of their younger colleagues. RN #7 stated, "The younger RNs complain that they 'didn't sign up for this.' If things get tough, they shut down." RN #6 felt that some younger RNs did not feel they needed to follow the PPE protocol, placing themselves and others in danger of contracting the virus.

Subtheme #3: Travelers

Several of the interviewees expressed concerns about the Travelers. In times of

staffing shortages, travelers are trained RNs who work for a travel agency and will come into an area to work, helping to fill the void. The hospital will contact the agency and report the number of needed RNs. Likewise, the agency will send RNs if they have them available. Often, travel RNs earn much higher salaries, which can cause frustration for the hospital staff. RN #1 stated (with a sarcastic tone.), "Then the resentment came when the travelers were getting $5,000/hour! It came down to money. We were tired!"

RN #4 expressed the most negative sentiment toward the travelers. She felt they were detached and some even unprofessional. She stated, "(the travelers were) .... yelling at the patients, saying it was their fault they had COVID-19. This broke my heart! These patients were from my community." She also shared that she had invested in these patients' caring processes and wanted to see them through, but the hospital pulled the staff out when the travelers arrived. She stated she felt she abandoned those on the battlefield. RN #7 thought that the travelers provided by FEMA always came late after the surge and were often not qualified to care for ICU patients. She stated the staff needed the break but were afraid to leave the patients with these poorly trained RNs. Likewise, the administration had to intervene to terminate the contracts of these travelers, adding to the staff's stress. I will further discuss the impact of the travelers and COVID-19 related developments in Chapter 5.

Subtheme #4: Felt like a Warzone

Throughout the pandemic, one consistent concern was the volume of critically ill patients and the demands placed on the ICU RNs to care for these patients with complex care needs. At the same time, some described the situations as working in complete chaos

or a medical warzone (Kissel et al., 2023). RN #4 stated, “It was like we were in combat. I tried to see myself as a soldier.” Miller et al. (2023) shared that we now have new mounting evidence of the effects of these working conditions on the ICU RNs, and I will discuss this in more detail in chapter 5.

Theme 2: Fear

After the RNs clearly expressed their own sense of duty to answer the call and serve, they all expressed some level of fear surrounding their experiences caring for these patients. RN #1 stated, “I felt fearful coming home, and I felt fearful at work!” RN #4 said, “We didn’t know what we were getting into, so it was all about fear initially.” “...I was so scared I was going to get it!” RN #5, “It was super scary. Um, yeah, it was just really scary! Oh my gosh, this brings back memories!” RN #6, “...so, of course, the world had ended! We were living in a whole new time! Paranoia ran amuck!” Each RN shared a different perspective on their own experiences of fear; some related to their potential exposure to the virus, while others were more concerned about family members.

RN #7 shared a different concern related to her fear. She stated that she participated in several public service announcements related to the pandemic, addressing protective behaviors such as wearing a mask and later getting the vaccine. She said she received negative comments about her participation in the public service announcements that sparked fear. She stated also, “I was fearful for my safety. We had death threats because families didn’t want [COVID-19] on the death certificate.”

The massive increase in positive COVID-19 cases across the globe forced RNs to care for patients without fully understanding the disease’s manifestation. Morgado-

Toscano et al. (2023) explained that caring for these patients placed RNs in close proximity to the critically ill, with less-than-optimal resources, such as inadequate PPE or ventilators. Likewise, these RNs were at higher risk of becoming sick themselves from this close contact and potential exposure. Morgado-Toscano et al. also explained that this constant state of fear and anxiety placed RNs at a higher risk of developing psychological challenges and a weakened immune system. These authors also discussed that the RNs working in fear, with unfavorable working conditions and poor supplies, may also lead to a greater risk of patient care compromise, jeopardizing patient safety. I will discuss this in more detail in Chapter 5.

Subtheme 1: More Death Than Ever Seen in my Career

A significant stress factor for many of the RNs was the amount of death they witnessed and the patients dying alone. RN #2 shared, "There were days when I would have six patients, and by the end of the day, I had put all six in body bags. I don't think people understood that!" RN #2 also shared, "So many patients died without seeing their families again. Even staff had family members with COVID-19, some of whom were in other hospitals. Some did not survive, but the staff had to keep working and often couldn't see their family members." RN #3 stated, "It was very hard because they (the patients) were alone; they were dying alone, and the families couldn't go in." RN #3 also shared, "Somedays, I'd go home crying. It was the death itself; there was so much of it!"

RN #5 explained how she felt caring for these critically ill patients and the fight to keep them alive. She explained, "It was so mentally draining! We tried everything to stabilize them, but it was still rock and roll. And all of a sudden, they would dump...so

hemodynamically unstable, you just watched them die!" RN #7 described watching a 42-year-old father, with no medical health history, die on Facetime with his children. She felt her administration did not fully grasp what the nurses were experiencing in the ICU with all of these deaths every day.

Nurses caring for patients during the pandemic experienced challenges differently than in pre-pandemic care. With limited resources, the constantly changing landscape surrounding the care practices and staffing models placed these RNs in unprecedented stress levels. Bandini et al. (2023) explained that little is known about the potential impact of witnessing so much death and watching patients die alone. In addition, these authors also discussed the length of time the RNs were exposed as the pandemic continued for several years. I will discuss this concept further in Chapter 5.

Subtheme 2: Fear for Family's Safety

During the pandemic, many RNs feared they could bring COVID-19 home to their family members. RN # 6 explained that she cared for the patients at work, but when she came home, she was responsible for her elderly mother. RN #1 explained that many RNs in her area of California were living in recreational vehicles to facilitate isolation from the rest of the family and help prevent contamination.

One of the RNs interviewed for this study contracted COVID-19 and, likewise, had to leave bedside nursing. RN #5 shared, "The turning point for me was when I got COVID-19 and my entire family got COVID-19. My son was critically ill. It was scary!" She explained how she was so sick but felt she had to help care for her son during his critical state.

Subtheme 3: Poor Quality PPE—Fear for One's Safety

The RNs all expressed concern for their own safety throughout the pandemic. RN #1 said, "The products we were getting, some were good, and some were falling apart. We were afraid we were not protected." RN #4 said, "I had the N95 and I couldn't breathe. I was so scared I was going to get it!" RN #5, "We had a nationwide shortage of N95s. We had to sterilize and reuse our N95s! It was disgusting!" RN #6 shared, "Some areas didn't take PPE as seriously, and 3/4 of staff got sick. There was so much chaos; I am surprised I didn't have a stroke! I was traumatized! I am still traumatized!"

Theme 3: We were Not Prepared

During the interviews, my second question asked the RNs what they felt could have been done differently by any entity. The overwhelming theme was a need to be better prepared. While some of this information will overlap with other themes, each area warrants attention as these are areas to address before future pandemics. While history includes stories of previous pandemics, the medical community was unprepared for the COVID-19 pandemic in many areas. The RNs offered the following observations concerning actions to better prepare for the next incident.

Subtheme 1: Infrastructure

Many hospitals lacked anterooms- a small room outside the patient's room that serves as a barrier to help block the contaminated air from the patient's room. RN #4 shared that her hospital spent money on the construction of anterooms and negative pressure rooms to help protect staff from the virus, but the infrastructure was not in place before the pandemic. As the medical community learned more about the virus and the

transmission mode, many hospital administrations initiated such construction to help eliminate contamination. RN #6 complained that her hospital did not have enough showers to enable the staff to shower before leaving the facility. She worried about taking the virus home to her elderly mother. RN #6's hospital built temporary changing rooms for the staff to change their clothes before leaving the hospital which did help.

Subtheme 2: Inadequate Supplies

Across the board, RNs complained about inadequate or poor-quality supplies that they needed to care for their patients. RN #1 shared that her hospital ran out of oxygen! "We ran out of syringes and foleys! We ran out of propofol! Propofol!!" RN #1 also said, "It was manpower we needed as well as drugs!" At the beginning of the pandemic, ventilators were in short supply, as well.

The use of PPE also evolved throughout the pandemic. All staff wore N95 masks at the beginning of the pandemic. RN #5 shared the need to sterilize and reuse N95s, but RN #4 shared that her hospital purchased PAPRs, which were easier to work with and allowed her to remain in the patient's room longer. RN #4 stated that wearing the N95 for long periods was difficult, and she had trouble breathing.

Subtheme 3: Staffing

Inadequate staffing is a common concern among ICU RNs. Due to the complex nature of care required of ICU patients, the nurse-to-patient ratio is generally low, frequently one nurse to one or two patients. Pilbeam and Snow (2022) explained that the pandemic forced changes in staffing models. The increased number of patients and the complexity of the required care forced hospital administrators to redeploy RNs from

other departments to help in the ICU. However, these redeployed RNs did not have the necessary skills or training to care for critically ill COVID-19 patients. RN #3 stated, "We had all kinds of people helping, but it was always the ICU RN responsible for everything; it was exhausting!"

ICU RNs collectively attempt to maintain an accepted standard of care to strive for positive patient outcomes. During the pandemic, this became impossible due to the increased number of patients and the lack of trained personnel to meet the demands, as well as the complexity of the care required of COVID-19 patients. Pilbeam and Snow (2022) shared that in many ICUs, the traditional nurse-to-patient ratios were impossible to meet, likewise forcing RNs to assume massively increased workloads daily. RN #3 stated, "We were short-staffed, um, I had three patients 99% of the time, if not 100%, plus being in charge!" I will discuss this further in Chapter 5.

In many cases, the ICUs were short-staffed before the pandemic. RN #1 stated they worked mandatory overtime every week. With inadequate staffing to cover the needed shifts, there were no additional staff to cover breaks or allow the staff to take off to rest. RN #7 stated her hospital requested emergency ICU RNs from FEMA, but they always arrived after the surge and frequently lacked critical care nursing skills. RN #4 said they are still short today and often work most of their shift without a break.

Subtheme 4: Education

Education can play a vital role in preparing staff for the unexpected. Practicing skills, such as donning and doffing PPE properly, can help put staff members at ease when faced with a crisis. I conducted a one-time test run with a friend and fellow ICU

RN to prepare myself for the interview process of this study. The test-RN did not meet the inclusion criteria, but she offered some fascinating insight. A full-time educator for many years, she stated that all education stopped at the start of the pandemic, which is when she offered her services at a local hospital in her community. At a time when education was needed, the hospital administrators stopped it all. RN #6 stated, "Education is critical! Education is the only answer! We need to be better prepared; education is how that happens." If we study the past, we can prepare for the future.

Theme 4: Psychological Stress/Moral Distress

The pandemic contributed to multiple challenges for critical care nurses worldwide, but the ongoing exposure to these stressful situations manifested far deeper concerns. Morley et al. (2019) described moral distress as a situation in which the individual knows the right or proper action but cannot carry out the correct actions due to circumstances beyond their control. Likewise, such conditions can manifest into feelings of anger, frustration, guilt, anguish, depression, and more. Morley et al. further explain that moral distress can trigger medical professionals to withdraw entirely from patient care and their profession.

Critical care nurses tend to display a solid work ethic, wanting to deliver high-quality patient care. During the pandemic, such delivery became impossible. These RNs faced potentially dangerous situations, substandard nursing care provided by poorly trained staff, and patients dying without family members present. RN #6 described her concerns over coworkers refusing to follow PPE protocols, placing everyone at risk. RN # 3 shared her concerns over the number of deaths she witnessed almost daily. RN #7

described her team's concerns surrounding inadequately trained FEMA RNs. Anderson et al. (2023) explained that such exposures could contribute to feelings of continued distress, even after the situation has subsided, creating a new baseline.

The daily chaos and the constantly evolving landscape surrounding the care of COVID-19 patients contributed to increased stress for the nurses. Kissel et al. (2023) stated that witnessing substandard care increased the RNs' stress, creating frustration and feelings of inadequacy. The diminished professional fulfillment also added to the stress level as a result of the high death rate related to COVID-19 patients. RN #5 stated, "We work so hard, and the patients dump! You just watch them die. I don't feel any sense of accomplishment."

Throughout this project, I addressed aspects surrounding the challenges of caring for COVID-19 patients, burnout, PTS, and compassion fatigue. In Chapter 5, I will delve further into psychological stress, moral distress, and the impacts on critical care RNs' career longevity. Since the start of the pandemic, a significant amount of research appeared addressing many of these aspects and concerns. Likewise, this study's participants shared insights aligning with much of the research.

Subtheme 1: Staffing

The RNs interviewed for this study all stated they worked overtime during most of the pandemic. But they also state that the hospital would call them on their days off, "You hated to answer your phone!" RN #4 described a scenario that took place the day before she met with me for her interview. She explained, (while crying) that she found her coworker in the bathroom, sobbing. She said it was 4:30 PM, and they were getting

their first break of the day. She said they were very busy with critical patients and had no time for a break earlier. The coworker said, if she "could have just gone to the bathroom or gotten a sip of water, she might not feel this way now!" We are now four years into the pandemic, and RNs continue to experience stressful situations almost daily.

One RN shared that her hospital has a slightly different situation. The administration aggressively increased the ICU staff but now expects the ICU RNs to float to other departments, for which they are not trained. This also places the RN at risk of making a mistake and the patients on that floor at risk. RN #7 stated that when they refuse to float to these other floors, the administration initiates disciplinary action. She said, "After all we did during the height of the pandemic, they do this to us now. RN #7 stated, "I am more disillusioned and burned out from things happening in my hospital now. I don't do anything extra, just the minimum."

Subtheme 2: The Administration Did Not Check on Staff

Several of the RNs commented that the administration did not check on their mental health status. They would hear comments like, "We are in this together..." but no one from the administration entered the COVID-19 rooms. The RNs expressed feelings of abandonment, and some felt disillusioned.

Subtheme 3: No Psychological Support

The RNs collectively commented on the lack of psychological support for the nursing staff. RN #1 said we would lose a patient, take them to the morgue, and immediately have to take another patient. There was no downtime or any debriefing. She also felt that having psychological support for the families might have helped. The RNs

could not provide that care level, as they had to care for the patient first.

Many of the RNs felt isolated from their community as well. In some cases, neighbors or even family would avoid the nurses for fear of contracting COVID-19. RN #2 said her neighborhood avoided her and her family. They also struggled with the political climate and misinformation, adding to their stress. RN #4 said that her husband is an emergency nurse, so she felt thankful that they could debrief with each other. In contrast, her coworkers did not have that luxury.

The collective lack of support contributed to feelings of disrespect or being devalued. The RNs stated that during the initial phases of the pandemic, their hospitals initiated virtual rounding. The RNs would don PPE and take a camera or tablet into the patient's room. They would do the assessment with the camera while the doctor was outside the room. Several commented that it was "OK for the RN to be exposed to COVID-19 but not the doctor", contributing to them feeling devalued by the hospital. What several RNs feel most frustrated by is the fact that virtual rounding has continued, placing excessive stress and overwhelming responsibility on the RNs.

Subtheme 4: Death and Dying from COVID-19

Although I addressed death and dying in several other areas, I felt it warranted additional coverage under moral distress. Bandini et al. (2023) shared that we do not know the long-term impact of the massive deaths these RNs experienced during the pandemic and beyond. RN #3 said it was hard for her to witness so much death, and the patients were all alone. RN #1 said it was really hard to have PPE on and try to communicate with families via Zoom, and the patient was dying. RN #7 said she was

fearful because several families did not believe COVID-19 was real and did not want that on the death certificate. Likewise becoming irate with nursing staff members.

Paradise California

Throughout these interviews, the RNs shared details of their COVID-19 experiences, and all shared strong similarities surrounding fear and a sense of duty. However, RN #1 shared a unique experience that warranted specific attention. On November 8, 2018, a devastating fire destroyed the town of Paradise, California (Hamideh et al., 2021). and likewise burned the 52-bed community hospital, Feather River. RN #1 worked in that hospital most of her career as an ICU RN and stated she had planned to continue working there as long as she was physically able. Sadly, the fire destroyed both her place of employment and her home, forcing her to go to a nearby community, a new home, and a new hospital, where she had different equipment and policies to learn.

During her interview, RN #1 shared that the community was still recovering from the fire, and many citizens had severe lung damage as a result. Likewise, these individuals succumbed to COVID-19 much faster, "adding insult to injury," as she put it. She stated that oxygen demands for these patients were much higher because of the residual effects of the exposure to the fire a year and a half earlier. In addition, these patients were in their 20s and 30s, making it more stressful for the staff, to lose such young citizens.

RN #1 explained that her attitude was already challenged because of the fire, and facing COVID-19 in a new hospital with new equipment and protocols made her rethink

her career longevity. Her experience helped illuminate other considerations for dealing with future pandemics. First, the disease manifestation in a community previously hit with a disaster, such as a fire, will place the citizens at increased physical compromise. Secondly, the hospital staff may be at greater risk of burnout or compassion fatigue, warranting additional attention. I will discuss this topic in more detail in Chapter 5.

Burnout and Career Longevity

Throughout the interviews, the RNs shared many details of their experiences caring for COVID-19 patients. Interview question #3 directly asked the nurses if they had experienced burnout and how they are doing now, while question #4 addressed career longevity. In this final section of chapter 4, I would like to focus on these specific details. Table 3 displays these results; I will discuss each RN's views here.

Table 3

Reported Burnout and Plans for Career Change

	Did you suffer Burnout?	Did your career plans change?
RN #1	Yes (campfire)	Yes-retiring early
RN# 2	YES!	I would have retired!
RN #3	YES!	No
RN #4	Yes	Yes- retire as soon as I can
RN #5	Yes	Left bedside
RN #6	No	No
RN #7	Yes	Yes

RN #1 stated she felt her burnout was connected to the Camp Fire and all her community was going through. She said that if she were still working at Feather River (the hospital that burned in Paradise), she would have continued working as long as she could, but she decided she would retire early because of COVID-19. "I feel it was a

matter of time until I make a mistake." RN #2: "Yes, I burnt out! I would have retired last year if I could have!" I have supportive leaders now. They have my back!' RN #3: "I definitely burnt out! Somedays, I would go home crying. It was the death in itself; there was so much of it!" "I am an ICU RN through and through. I don't think I would be happy doing anything else." "Sometimes I still have meltdowns." "I am proud to be an ICU RN." (RN #3 shared personal information concerning her health that could impact her career longevity.). RN #4: "Yes, I definitely burned out. I wanted to work until I was 72! During the pandemic, all that changed. I'm gonna retire as soon as I can. Definitely, I felt the pandemic took ten years off my life!" RN #5: "Oh my gosh, yes! I definitely experienced burnout!" RN #5 shared that having COVID-19 herself and her family also becoming ill was a turning point for her. She currently has a different role but is still in nursing. RN #6 does not feel that she experienced burnout. She stated that she does not plan to change her career path. "It made me smarter!" She plans to work as long as she can but continues to wear an N95 mask at work. RN #7: "It's hard to say; I am more disillusioned and burned out by what is going on in nursing and health care. I never regretted being a nurse. I always loved my profession. But when people are abusing us... If I had a choice financially, I would have gotten out. More because of the disrespect of the public and the administration. "RN # 7 states that she no longer does anything extra to help the hospital/administration.

Six of the seven RNs reported experiencing some level of burnout—RN #5 left bedside nursing because of her family's experience with COVID-19. Four of the seven stated they would retire earlier than previously planned. Two of the seven said they plan

to remain in nursing. I will delve into this information further in Chapter 5.

Summary

Throughout Chapter 4, I shared the details of my qualitative inquiry into the burnout status and potential changes in the career longevity of ICU RNs working in rural hospitals in the United States. I discussed the setting, demographics, data collection, data analysis, and results. I also explored evidence of trustworthiness and described the themes identified from the interviews. Finally, I offered an assessment of the RNs' self-reported burnout and potential career changes.

Within Chapter 5, I will share my interpretation of the above findings. I will address details surrounding travelers, fear collectively, and the exposure to multiple deaths. I will also discuss concerns surrounding the lack of preparedness: infrastructure, supplies, staffing, and education. The political rhetoric deserves some attention, and I will discuss the challenges I ran into surrounding the state nursing boards. I will address the Paradise fire and its potential impact on future events.

Most importantly, I will delve into psychological stress, and moral distress in Chapter 5. I wish to cover the illuminations offered by the RN participants concerning their burnout status and career longevity, as well as the implications they offer. I also will share my limitations, recommendations for future study, and a syndrome proposal.

Chapter 5: Discussion, Conclusions, and Recommendations

Due to COVID-19, ICUs worldwide became overrun with critically ill patients, forcing ICU RNs into more challenging situations than ever experienced. There was a staffing crisis before the pandemic, but now the situation is worse and continues to worsen daily (Bourgault, 2022). The nursing shortage is a worldwide crisis exacerbated by the pandemic (Burki, 2023). Within this hermeneutic phenomenological study, I explored the lived experiences of ICU RNs in rural community hospitals in the United States who cared for these critically ill patients with COVID-19. Many shared experiences that matched those reported in the literature, by RNs across the country.

Within Chapter 5, I will share my interpretation of my research findings. Specifically, I will address details surrounding travelers, fear collectively, and the RNs' exposure to multiple deaths. I will further discuss the lack of preparedness regarding infrastructure, supplies, staffing, and education. In this chapter, I will discuss the political climate and the challenges I ran into surrounding the state nursing boards. I will also address the Paradise fire and the potential impact of disasters on future events. Most importantly, I will delve into psychological stress and moral distress of these RNs. I wish to cover the illuminations offered by the RN participants concerning their burnout status and career longevity as well as the implications they offer. I also will share my limitations, recommendations for future study, and a new syndrome proposal.

Interpretation of Findings

The rapid manifestation and proliferation of the COVID-19 pandemic placed critical care RNs across the globe in unprecedented scenarios. Patients sicker than many

RNs had previously witnessed, a massive death toll, and shortages of supplies, medications, and trained staff members placed undue stress on these dedicated professionals. The RNs interviewed for this study shared their lived experiences surrounding the COVID-19 pandemic and their views of the challenges faced by rural community hospitals.

Travelers

During the interview process, several RNs shared their dissatisfaction with travel nurses. Challenges with RN staffing are familiar, and throughout the past few decades, travel agencies have served by providing trained and experienced RNs to fill the void. Likewise, this service can help hospital management provide safe coverage for vacant shifts. Early in the pandemic, travel agencies experienced an increase in demand of 37% or greater in an attempt to cover the massive need (Yang & Mason, 2022).

Bringing in travelers can negatively impact the hospital staff. The existing staff often feel they have been dedicated and working hard to care for members of their community, with a sense of loyalty. The travelers can decrease morale, especially when staff members find out how much money the travelers earn, which is often significantly higher than the staff members' pay (Yang & Mason, 2022). As RN #1 stated, "Then the resentment came when the travelers were getting $5,000/hour!" This sentiment caused frustration and resentment among the staff RNs, who felt they had worked so hard to serve their communities. In some areas, staff nurses left their full-time posts to join travel agencies, making significantly more money.

The RNs interviewed also expressed that the travelers were often detached and

unprofessional. RN #4 seemed to be the most concerned about the travelers, stating she felt she had worked hard and did it "out of love for my community." She stated, "[the travelers] ... yelling at the patients, saying it was their fault they had COVID-19. This broke my heart! These patients were from my community." She also expressed frustration that she had invested in these patients' care and wanted to see them through, but the hospital pulled the staff out when the travelers arrived. She stated she felt she abandoned those on the battlefield.

RN #7 further noted that the travelers provided by FEMA always arrived late after the surge and were often not qualified to care for critically ill patients. She stated the staff members were tired and needed a break but were afraid to leave the patients with these poorly trained RNs. Likewise, the administration had to terminate the contracts of some of the travelers, adding to the stress. Witnessing substandard care provided by other staff members can increase the RNs' collective stress, contributing to decreased professional fulfillment (Kissel et al., 2023). Constant chaos, rapidly changing organizational structure, nurse-to-patient ratios, supply and medication shortages, poor communication, and inadequately trained travel nurses also place the staff RNs in unprecedented stress levels, impacting their well-being (Kissel et al., 2023).

Fear

As each interviewee shared their sense of duty to care for those critically ill patients stricken with COVID-19, they all expressed fear connected with the situation. At the outset, the medical community knew little about the virus and the disease manifestation, mode of transmission, sequelae, or appropriate treatment modalities. RN

#4 shared, “In the beginning, we didn’t know what we were getting into, so it was about fear. I was concerned if I was going to survive myself.”

The lack of knowledge, combined with shortages of proper PPE, added challenges for these RNs (Morgado-Toscano et al., 2023). In some areas, RNs had to reuse PPE. RN #5 described having to sterilize and reuse N95 masks and how disgusting she felt it was to have to do this. Critical care RNs must be in close proximity with the COVID-19-positive patients to provide care, assessments, treatments, medication, proning, and any other procedures they may require. The massive increase in COVID-19-positive patients across the globe forced RNs to care for patients without fully understanding the disease’s manifestation.

Working in a state of constant fear can impact the individual’s mental and physical health, leading to anxiety, cardiovascular, gastrointestinal, and neurological disorders, as well as a weakened immune system (Morgado-Toscano, 2023). The greater the RNs’ exposure to critically ill COVID-19 patients, the greater the risk of the nurse developing a psychological concern manifested as a result of working in fear (Morgado-Toscano, 2023). Nurses have shared frustration with feelings of being overwhelmed and fearful with heavy patient care demands, dissatisfactory working conditions, poor PPE, and continued close contact with COVID-19-positive patients. RN #1 stated, “I felt fearful coming home, and I felt fearful at work!” RN #4 said, “I was so scared I was going to get it!” RN #5, “It was super scary. Um, yeah, it was just really scary!” RN #6, “so, of course, the world had ended! Paranoia ran amuck!” Each RN shared their feelings of fear related to the pandemic, either for their own safety or that of their families. RN #7

shared her concern related to fear of retaliation from family members who did not want COVID-19 listed on their loved one's death certificate. She stated, "I was fearful for my safety. We had death threats." Several of the participants also shared their frustration with virtual rounds, saying that it was OK for the RNs to be exposed to the virus but not the doctors, placing RNs at risk and adding to their feeling devalued.

As explained in Maslow's hierarchy of needs, humans seek to fulfill physiological needs first, then, they strive for safety and security (Mustofa, 2020). RN #4 described a scenario where she found a coworker sobbing in the bathroom because she had worked all day without a sip of water or a bathroom break and felt extremely overwhelmed and exhausted. This scenario indicates that the RNs cannot meet their physiological needs, which can add to their vulnerability. For these RNs to work in such conditions daily, with constant physical and psychological demands, places them at risk for further burnout and a desire to leave their profession. Adding these concerns to the fear they face daily from caring for COVID-19-positive patients indicates an alarming concern for these RNs' mental and physical well-being. Further research on this topic is critical for the safety of this valuable population.

More Death Than Ever Seen in my Career

Many enter nursing to serve and care for patients, promoting health collectively. Therefore, a situation that results in multiple deaths can impact nursing professionals psychologically. The COVID-19 pandemic contributed to thousands of deaths worldwide, placing nurses in a highly stressful situation. Many factors contributed to the high death rate early in the pandemic (Bandini et al., 2023). The sheer number of deaths

seemed to impact the participants of this study. RN #1 shared her experience with patients dying so quickly from the virus, many of whom had suffered lung injuries as a result of the Camp Fire in Paradise, California, in 2018. She said we would lose a patient, take them to the morgue, and have to take another patient from the emergency room right away, with no downtime and no debrief. RN #2 shared, "There were days when I would have six patients, and by the end of the day, I had put all six in body bags. I don't think people understood that!" RN #2 also shared, "So many patients died without seeing their families again. Even staff had family members with COVID-19, some of whom were in other hospitals, who did not survive." RN #3 stated, "It was very hard because they [the patients] were alone; they were dying alone, and the families couldn't go in." RN #3 also shared, "Somedays, I'd go home crying. It was the death itself; there was so much of it!"

Many ICU RNs feel a sense of pride when caring for critically ill patients, and when the patient turns around, recovering from their critical state, the RNs feel they helped facilitate that process. However, this rarely happened during the pandemic, as many patients succumbed to the virus. RN #5 explained how she felt caring for these critically ill patients and the fight to keep them alive. She explained, "It was so mentally draining! We tried everything to stabilize them, but it was still rock and roll. And all of a sudden, they would dump ... so hemodynamically unstable, you just watched them die!" RN #7 described watching a 42-year-old father, with no medical health history, die on Facetime with his children. She felt her administration had no idea what the nurses were experiencing in the ICU with all of these deaths daily.

The pandemic also forced ICU RNs to experience unprecedented stress levels due

to limited resources and the constantly changing landscape surrounding care practices and staffing models, as well as the number of deaths. RNs worked long hours with multiple challenges surrounding patient care (Rahmani et al., 2023), being exposed to the pandemic for years, far longer than expected (Bandini et al., 2023). These RNs are at risk of developing a profound state of grief and a compromise of their mental health status (see Rahmani et al., 2023). Continued study of these RNs will be vital to assess their psychological health and provide intervention as needed.

Lack of Preparedness

The RN participants shared their collective feelings concerning preparedness. Throughout history, various disease outbreaks, as well as pandemics, plagued citizens. Looking at the lessons learned from these events could have better prepared the medical community and the government for the COVID-19 pandemic.

Infrastructure

At the pandemic's start, many facilities lacked the infrastructure to accommodate the massive increase in critically ill patients. Additionally, many facilities were unable to accommodate the highly contagious SARS-CoV2. In most ICUs, there were not enough anterooms—small rooms outside the patient's room that served as a barrier to help block the contaminated air from the patient's room. RN #4 shared that her hospital administration initiated the construction of anterooms and negative pressure rooms to help protect staff from the virus. RN #6 complained that her hospital did not have enough showers to enable the staff to use them before leaving the facility. However, RN #6's hospital built temporary changing rooms for the staff to change their clothes before

leaving the hospital. RN #1 shared that they did not have enough ICU beds for all the patients and had to use an old office area to set up ICU beds, using generators.

Supplies

At the outset of the pandemic, medical professionals quickly learned that this virus was highly contagious and that patient care needs were quite complex, requiring massive amounts of supplies such as PPE, ventilators, medications, and more. Collectively, RNs complained about inadequate or poor-quality supplies that they needed to provide such care. RN #1 shared that her hospital ran out of oxygen: "We ran out of syringes and foleys! We ran out of propofol! Propofol!!," which is needed to sedate vented patients. RN #1 also said, "It was manpower we needed as well as drugs!" At the beginning of the pandemic, ventilators were in short supply. What constituted proper PPE also evolved throughout the pandemic. Initially, all staff wore N95 masks. RN #5 shared the need to sterilize and reuse N95s, but RN #4 shared that her hospital purchased PAPRs, which were easier to work with and allowed her to remain in the patient's room longer. RN #4 stated that wearing the N95 for long periods was difficult, and she had trouble breathing.

Staffing

Inadequate staffing is a common concern among ICU RNs. Due to the complex nature of care required of ICU patients, the RN-to-patient ratio is usually low, often one nurse to one or two patients. The pandemic forced hospital administrators to change staffing models (Pilbeam & Snow, 2022). Frequently, administrators chose to redeploy RNs from other departments to help care for ICU patients; however, these redeployed

RNs did not have the necessary skills or training to care for critically ill COVID-19 patients. RN #3 stated, “We had all kinds of people helping, but it was always the ICU RN responsible for everything; it was exhausting!”

The RNs strive for positive patient outcomes by maintaining standard care practices within the critical care setting. However, meeting these acceptable standards during the pandemic was impossible due to the number of patients and the lack of trained personnel to meet the care demands. The traditional nurse-to-patient ratios were impossible to meet, forcing RNs to assume massively increased workloads (Pilbeam & Snow, 2022). RN #3 stated, “We were short-staffed, um, I had three patients 99% of the time, if not 100%, plus being in charge!”

In many areas, the ICUs were short-staffed before the pandemic. RN #1 stated she and her coworkers worked mandatory overtime every week. With insufficient staff to cover the shifts, there were no additional nurses to cover breaks or allow the staff to take off to rest. RN #7 stated her hospital requested emergency ICU RNs from FEMA, but they always arrived after the surge and frequently lacked critical care nursing skills. RN #4 said they are still short today and often work most of their shift without a break.

Education

Education is crucial to prepare staff for the unexpected and instill confidence in various care procedures. Practicing skills can help put staff members at ease when faced with a crisis. As I previously shared, I conducted a one-time test interview with a friend and fellow RN to prepare for this study. While not meeting the inclusion criteria, she did offer some insight. A full-time educator for many years, she stated that all education

stopped at the start of the pandemic, which was when she began doing bedside care at a local hospital in her community. At a time when education was most critical, the hospital administrators stopped it all. RN #6 stated, “Education is critical! Education is the only answer! We need to be better prepared; Education is how that happens.” If we study the past, we can prepare for the future.

Additionally, RN #7 shared that her hospital redeployed RNs from other floors to the ICU and expected the ICU RNs to train these nurses while also caring for critically ill COVID-19 patients. She felt this was impossible due to the high care demands of the patients. Also, the administration had shut down the education department, leaving no one to offer classroom training for these new RNs. She stated this created a significant burden on the ICU RNs.

Political Climate

Sadly, the pandemic sparked a fair amount of misinformation and political controversy. Naturally, fear can spread with any deadly disease manifestation, but this can also fuel confusion and misunderstanding, likewise contributing to the spread of false concepts. Such rumors can breed distrust in the government, healthcare workers, and various prescribed treatment modalities. Misinformation may cause individuals to question potentially life-saving practices, such as wearing face coverings or social distancing.

During a health crisis, accurate information is critical to help control the spread of the disease. Erku et al. (2020) of the WHO explained the need to disseminate correct information concerning medications to treat the victims. Several RNs interviewed for this

project addressed the political climate as it affected their day-to-day functions. RN #1 shared, “There was the time with the politics! That didn’t help us!” People didn’t think it was real and would refuse to wear a mask.

Falode et al. (2021) explained how misinformation seeds mistrust in the government and healthcare workers. RN #6 shared that she feels that education, for everyone, is the answer. RN #7 shared that many in her area did not believe COVID-19 was real and did not want that listed on their loved one’s death certificate. The collective climate of misinformation and conflicting governmental entities can add to the stress RNs have already experienced.

State Nursing Boards

In order to practice as an RN, all states require a professional license. The individual must attend nursing school, graduate, and then take and pass an exam, the NCLEX- National Council License Examination. Then, the RN must maintain the license in good standing to continue to practice as a registered nurse. In many states, the overseeing entity is the Department of Commerce and Consumer Affairs.

During the initial phases of this study, I attempted to reach the state boards of nursing. Originally, I wanted to reach all 50 states, as these organizations oversee the licensure process and maintain lists of all currently active RNs in the states. I hoped to get the state nursing boards to disseminate my recruitment flyer to the RNs with presently active licenses.

Alabama was the only state to respond positively. However, the legal team declined the dissemination process, fearing the research might shed a negative light on

the care provided in that state. Most states did not respond to my emails or phone calls. Four of the 12 that I attempted to contact did answer my calls. Each of these four told me that for $100, I could purchase a list of all RNs in the state with an active license and their contact information. I asked if the RNs in their state knew that their own state nursing board was selling their personal information. All declined to answer my question.

Paradise Fire

Each year, we hear of the devastation caused by disasters, be they wildfires, hurricanes, tornados, or floods. The survivors of these events then must face challenges based on the level of destruction in their region. The human aspects of these disasters manifest in varied social vulnerability (Hamideh et al., 2021). While all disasters can significantly impact citizens, wildfires pose a unique threat because of the potential "ripple effect," as Rosenthal et al. (2021) described. Likewise, a wildfire may impact water and air quality in the immediate and surrounding areas, as well as housing, education, and health and social services.

During the immediate aftermath of a wildfire, basic physiological needs such as shelter become the priority. Rosenthal et al. (2021) explained that six months after the event, many people begin complaining of headaches and other similar symptoms, followed by a manifestation of full grief, usually a year to a year and a half after the event. So, while these individuals may continue to struggle with housing, employment, health, and social concerns, the psychological effects of the fire begin to emerge. Rosenthal et al. also explained that the post-fire loss of infrastructure may also mean that hospitals, doctor offices, clinics, and pharmacies may have been destroyed or damaged.

The health and social services professionals may, too, have lost their own homes, making it difficult or impossible for them to serve the community.

Individuals with chronic health conditions may have trouble obtaining medications after a disaster, as pharmacies may be limited in the amount they can dispense. Rosenthal et al. (2021) also explained that those most affected are usually the more vulnerable, the elderly, and fragile community members. These individuals face the same housing concerns as others but may do so in isolation while struggling with essential nutrition, as well as trying to maintain their medical regimen. This collective scenario can render these individuals more vulnerable to potential contagions.

Upon interviewing RN #1, I realized her community faced unique challenges that the other participants did not. On November 8, 2018, a fire destroyed the town of Paradise, California (Hamideh et al., 2021). Moreover, it burned the 52-bed community hospital, Feather River. RN #1 worked in that hospital most of her career as an ICU RN and stated she had planned to continue working there as long as possible. Sadly, the fire destroyed her place of employment and her home, forcing her to go to another nearby community, a new home, and a new hospital, where she had to learn new equipment and policies.

In her interview, RN #1 shared that the community was still recovering from the fire, and many citizens had severe lung damage as a result. Yu and Hsueh (2023) explained that exposure to smoke and other toxic debris after a fire can contribute to lung damage, making these individuals more susceptible to contagions such as COVID-19. As a result, these individuals succumbed to COVID-19 much faster. RN #1 explained that

these individuals had much higher oxygen demands and deteriorated rapidly, requiring ventilator support earlier than other patients.

RN #1 explained that her attitude was already challenged because of the fire, and facing COVID-19 in a new hospital with new equipment and protocols made her rethink her career longevity. Her experience exposed other considerations when dealing with future pandemics. First, the disease manifestation in a community previously impacted by a disaster, such as a fire, will place the citizens at increased physical compromise. Secondly, the hospital staff may be more vulnerable to burnout or compassion fatigue, warranting additional attention. This area should receive future research focus.

Psychological Stress/Moral Distress

The pandemic has raged on for more than four years now and has taken its toll on healthcare professionals worldwide. Contributing to multiple challenges, the ongoing exposure for these professionals manifested far deeper concerns impacting their psychological health. Miller et al. (2023) explained that there is now mounting evidence of the damaging impact of the continued high demands of COVID-19 patients and the highly stressful work environments. The rate of COVID-19 admissions to the ICU has diminished, and the mortality rates have also dropped, but now, the healthcare systems face a new challenge: increased numbers of ICU RNs leaving the profession (Miller et al., 2023). The current system involves a vicious cycle of poor staff welfare, staff members departing their employment, concerns for potentially decreased patient safety, and diminished quality of care, all of which need attention now.

While staffing challenges existed long before the pandemic, the COVID-19 crisis

exacerbated these issues. Malairojsiri (2023) shared that COVID-19 remains the greatest threat to these dedicated professionals. This author explained that the collective welfare of healthcare professionals has declined extensively over the last few years due to exhaustion, fear, and the risk of exposure almost daily. Within the work environment, these professionals face sources of stress and anxiety, all of which disrupt their coping mechanisms (Malairojsiri, 2023). The interviewees for this current study shared that they worked overtime throughout the pandemic, often receiving calls from the hospital on their days off. RN #1 said they worked mandatory overtime weekly during much of the pandemic.

Critical care nurses tend to display a solid work ethic, wanting to deliver high-quality patient care. During the pandemic, such delivery became impossible. These RNs faced potentially dangerous situations, substandard nursing care provided by inadequately trained staff, and patients dying without family members present. Traditionally, ICU RNs strive to deliver holistic care, addressing the collective needs of the patients and families; however, this became impossible due to the volume of critically ill patients with complex care needs and visitation restrictions. Pilbeam and Snow (2022) shared that part of the ICU RN's professional identity is the high quality and complex care they deliver and the pride they carry with this work. Likewise, the inability to provide high-quality care contributed to the RNs' psychological stress.

The daily chaos and the constantly evolving landscape surrounding the care of COVID-19 patients, especially in the early phases, contributed to psychological challenges for the nurses. Kissel et al. (2023) stated that witnessing substandard care

increased the RNs' stress, creating frustration and feelings of inadequacy and powerlessness. The diminished professional fulfillment also added to the stress level as a result of the high death rate related to COVID-19 patients. RN #5 stated, "We work so hard, and then you just watch them die. I don't feel any sense of accomplishment." The treatment of COVID-19 patients required changes in traditional procedures and previous approaches, which could likewise trigger increased anxiety, anger, and insecurity, leading to increased psychological stressors. Anderson et al. (2023) explained that such exposures could contribute to feelings of continued distress, even after the situation has subsided, creating a new baseline.

Each RN participating in this study shared their views of the stressors they faced throughout the pandemic. RN #1 shared her struggles after her community burned and then faced COVID-19 but also shared her feelings about the lack of psychological support for the nurses and the families. Several RNs shared their frustration with virtual rounding and how they felt and still feel devalued by their hospitals. RN #3 shared the sheer number of deaths she witnessed and how, today, she may still have a breakdown when a patient dies. RN #7 shared her feelings of frustration with the administration. "After all we did during the pandemic! I am more disillusioned and burned out now!"

As RNs worldwide reconsider their commitments to their profession, intervention to stop the continued damaging stressors might help. Morley et al. (2019) described moral distress as a situation in which the individual knows the right or proper action but cannot carry out the correct actions due to circumstances beyond their control. Likewise, such conditions can manifest into feelings of anger, frustration, guilt, anguish, depression,

and more. Morley et al. further explained that moral distress can trigger medical professionals to withdraw entirely from patient care and their profession. ICU RNs are struggling and need support to stop the departure of these dedicated and talented professionals. These professionals are critical to the future of healthcare.

Burnout and Career Longevity

The COVID-19 pandemic helped illuminate many concerns among nursing staff worldwide, but one phrase became almost synonymous with the crisis: burnout. Burnout existed long before the pandemic and was a well-known phenomenon among ICU RNs. Dall'Ora et al. (2020) reported that increases in workload, combined with a loss of control over the nurse's work environment, decreased reward, a loss of community connection, feelings of reduced fairness in the workplace, and conflicts with personal values or ethics could all contribute to the development of work-related burnout. These authors also reported that the nurses struggle with increased psychological demands, patient care complexity and suffering, and patient deaths, all contributing to burnout, as seen during the COVID-19 crisis. Over time, the nurse's question or become disenchanted with the career path they once cherished.

The first cases of COVID-19 appeared in December 2019, but by May 2022, more than 900,000 Americans had succumbed to the virus, with many ICUs overrun with critically ill patients. The increases in demands on the ICU RNs contributed to increased psychological stress and work-related burnout. Christianson et al. (2023) shared that with increased work-related burnout, there is also an increase in iatrogenic infections, patients' length of stay in the hospital, and a reported increase in patient mortality. With the rise in

work-related burnout also comes the intent to leave their job or the profession entirely.

During the crisis, the standards of patient care shifted due to the complexity of the virus. Calkins et al. (2023) reported that ICU RNs' expressed a conflict with their commitment to providing high-quality care and the reality of the increased volume of patients, care demands, and inadequate PPE, creating moral distress and, ultimately, burnout. Many RNs see themselves as second victims, feeling underappreciated, overworked, and betrayed. When RNs leave their jobs, the shortage worsens and increases the demands on those remaining. Calkins et al. reported that if current trends continue, by 2030, the United States could witness a shortage of over 14 million RNs, or half the nursing workforce.

Within the current study, six of the seven RNs reported experiencing burnout during the crisis. Five of the seven said they would leave bedside sooner than originally planned due to their pandemic experiences. Four of the seven said they are only staying because of financial concerns, as Christianson et al. (2023) supported. Those four stated they will retire as soon as they can. RN #5 did leave the bedside because she and her family contracted COVID-19. RN #4 said, "I feel the pandemic took ten years off of my life!" Based on the experiences of these seven RNs, work-related burnout is at a crisis level now, and based on the findings of Calkins et al. (2023), it could exacerbate over the next few years.

Limitations of the Study

The research process allows one to delve into unknown areas, potentially illuminating new concepts or providing a deeper understanding. However, no study exists

without challenges or limitations. My study is no different. My limitations for this project begin with my population being small, with only seven RNs, all female and over 50 years of age. Likewise, this caused the omission of the younger ICU RNs and male nurses. While I hoped to reach RNs nationwide, I only had responses from RNs in three states.

Additionally, four of the seven RNs work and live in Hawaii, providing multiple views about one state. The other RNs lived and worked in California (one RN), and two live in North Carolina. One of the RNs from North Carolina lived in Michigan and worked in a rural hospital there during the early phases of the pandemic. While the information these RNs shared offered rich and compelling data, the representation of more states would offer an even greater view of the lived experiences of ICU RNs during the pandemic.

The recruitment process was problematic initially. Sharing my IRB-approved flyer on Facebook and LinkedIn produced dismal results initially, requiring my aggressive tactics. Contacting fellow RNs nationwide produced a significant response, resulting in five of the seven participants. Before this project, I did not know or work with the recruited RNs, likewise preventing that potential bias. Each RN showed respect for the research process and a desire to assist me with the data collection. Since they did not know me either, there were no concerns for biases throughout the interviews.

One of the RNs interviewed in this study contracted COVID-19 and was forced out of bedside nursing, offering a unique view of her experiences. Interviewing more such RNs could offer much richer data surrounding such experiences. Upon learning they fit this description, I reached out to several RNs; however, none responded. Time served

as a limitation, as providing the time needed for these RNs to come forward might contribute more depth to the overall results.

Dibley et al. (2020) shared that the validity of a study refers to the potential that a research project will demonstrate the expected data and answer the research question. The reliability of the study addresses consistency: will the study produce the same results if repeated, while the generalizability indicates the potential to apply the findings to another similar population with confidence (Dibley et al., 2020). Demonstrating validity, the interviews comprehensively described these RNs' lived experiences during the COVID-19 pandemic, answering the research question. The outcome of the seven interviews produced many of the same themes, indicating the reliability of the overall study is good. While the sample size was small, only seven RNs from three states, they offered rich data that was consistent with literature from across the country. A larger, more diverse sample might add more richness and depth, adding to the validity, reliability, and generalizability. Also, due to the timing of the data collection, the interviews were conducted during the holiday season. Perhaps, asking RNs to share one of the most traumatizing experiences of their careers during the holiday season, might not have been wise. If timing would have allowed, conducting interviews either before or after the holiday season might have recruited more participants.

Recommendations

This hermeneutic phenomenological study allowed me to explore the lived experiences of seven ICU RNs working in rural community hospitals during the pandemic. Their experiences offered insight into their challenges and illuminated the

need for further study, as well as interventions. Since the pandemic started, much research appeared among the published works, illustrating some of the challenges of caring for COVID-19 patients. The qualitative design allows healthcare workers and ICU RNs specifically to share intricate details of their experiences; some such experiences may not manifest within the quantitative design. The participants of this study shared their collective sense of duty, the fear they faced, the feelings they had toward the lack of preparedness, and struggles with psychological stress and moral distress. Their insights support much of the reported experiences of RNs across the United States and beyond. However, more work is needed to fully understand the pandemic's magnitude.

Across the globe, RNs answered the call to care for these critically ill patients, and now many of them are hurting. Many RNs are contemplating leaving their beloved profession, a profession for which they entered with pride. Five of the seven in this study stated they either have left or will leave as soon as possible. What changes are needed to stop this trend? Bourgault (2022) explained ICU RNs just want to come to work in a well-staffed unit, have the supplies they need, and safely care for their patients. Many RNs, including those interviewed for this study, were proud to be ICU RNs and wanted to continue this work as long as they could. But, as RN #4 stated, "...the pandemic took ten years off my life."

Covid-19 has now been a concern for more than four years. RNs continue to work short, sustaining heavy workloads over long shifts, often without breaks. What is the continued impact on these professionals? We need to continue to evaluate those that have remained in the field. What was the effect of witnessing all of those deaths early in the

crisis? Bandini et al. (2023) explained that we do not fully understand what that impact will be, and we should continue to monitor these professionals. Also, how traumatizing was the experience of watching the patients die alone and the effect of their powerlessness?

I would like to be able to follow up with these seven RNs in one year, three, and five years. I would like to gain a deeper understanding of the transitions they experience over the next several years. Are they able to return to the same level of pride they once held for this profession, or do they ultimately leave the field? Qualitative remains the best choice for such research as this allows the participants to offer insights, not always evident with quantitative. The RNs can speak freely and explain their experiences.

Education can play a vital role in preparation for future events. Education systems shut down at the pandemic's start, leaving nurses to figure it out themselves. RN #6 said, "Education is the only answer!" She explained how we have not had any training on tuberculosis in years. What if it reappears? We could have a repeat of the COVID-19 crisis. Education on past events, even this event, can help prepare the next generation of care providers to better understand how to protect themselves and their families and to do their jobs.

The experiences of RN #1 helped illuminate the need for further research on post-disaster communities. Her community suffered a devastating fire, and likewise, the citizens succumbed to COVID-19 much quicker. What else can we learn from these communities? What about the psychological health of the medical community after they themselves suffered the loss? RN #1 wanted to continue working as long as possible, but

the fire and COVID-19 forced her to reconsider.

Perhaps the group of individuals most worthy of attention might be the hospital administrators. Insight into the thought process behind some of their decisions might be helpful. Currently, many RNs do not have a favorable view of administrators. This may be justified, but qualitative research could uncover nuances that were not previously evident. RN #7 stated, "The hospital is just a business now." Therefore, she feels the leaders do not understand what the nurses face. Are they aware that the RNs are still struggling? Are they aware that RNs continue to work without breaks and then find each other sobbing in the bathroom? Burki (2023) explains that the only way to stop the massive loss of RNs is to listen to them, offer psychological support, and fix the broken system.

Are hospital administrators aware that virtual rounds continue in many areas? Are the insurance companies aware of this practice? Are doctors billing insurance for a medical doctor's level assessment when an RN conducts it with a camera? Are the RNs paid for the assessments they are performing on behalf of the doctors? Is this practice ethical?

Battered Woman's Syndrome/Embattled Nurses' Syndrome

When I first began this study, I found myself drawn to the battered woman syndrome and how there were similarities to what RNs experience. According to Dutton and Painter (1993), the syndrome involves a three-stage cycle. This sequela repeats itself through the build-up, abuse, and remorse. Through each phase, the victim struggles with psychological stress, alteration in self-esteem, and learned helplessness, which likewise

undercuts the willingness to leave the situation. Dutton and Painter explain that the victim develops psychological numbing, reduced responsiveness to the assaults, and self-destructive coping tactics.

After reading many articles and listening to the interviews for this study, I propose the *Embattled Nurse's syndrome*. I feel there are similarities to the sequelae that manifest with battered woman syndrome, and this might help identify many of the challenges the RNs face. The grooming RNs experience from hospitals, and although the battering is not necessarily physical abuse, the RNs often describe feeling almost beaten at the end of their day. They frequently report feeling betrayed, just as in battered woman syndrome, and often feel helpless.

In 2012, Drake et al. suggested changes in the focus of nursing practice. These authors proposed the hospital nurse force theory, supporting the idea that RNs function to the full extent of their skills and education, obtain higher educational levels, function as full partners with doctors, and participate in policy development. However, during the height of the pandemic, such responsibilities became exaggerated. In some rural hospitals, RNs frequently entered the rooms of COVID-19-positive patients and conducted virtual rounds, assessing the patients on behalf of the physicians. The RNs in this study complained of feeling devalued that it was OK for them to be exposed to the virus, but not the physicians.

Frequently, someone enters the nursing profession, seeing it as a calling to serve. They enter the profession proud and hopeful, believing they can make a difference. However, in some areas, these young and hopeful nurses feel beaten by the system and

betrayed by those in place to protect them. Often, hospital administrators undervalue the work done by the nurses and try to minimize the number of staff members needed to cover a shift (Burki, 2023). While the public may entrust the nurses with the responsibility connected with their professional power, the administration appears to groom them and take advantage of the sense of duty they display. RN #7 stated during her interview, "It is just a business now." Burki explained that RNs often report feeling undervalued and under extreme pressure in the work environment, similar feelings to the woman in an abusive relationship. They often feel torn about their situation and hesitate to leave, even when they know it is unhealthy.

Implications

While I would like to think my research will contribute to positive social change, I feel I uncovered areas that will need a great deal of work for many years to come. The COVID-19 pandemic changed the world, especially critical care nursing, in unimaginable ways. ICU RNs suffered personally and professionally and now need support to regain their previously held professional pride if there is still time. The data uncovered through the interviews helped illuminate areas of needed attention, which matches much of the published data.

Many scholars have expressed concerns over the broken healthcare system of the United States. Bourgault (2023) shared that RNs can't wait; we need intervention now. The research uncovered by this study supports such findings. The challenges are society-wide and will require many entities to address all avenues. Awareness and communication are the best places to begin.

Conclusion

The lived experiences of ICU RNs from across the globe have forever changed due to the pandemic. COVID-19 has impacted the medical world in ways once thought unimaginable. Now, nurses are tired, and they need help. This study is only one small contribution toward the need to illuminate what these nurses experienced. The future of our healthcare system depends on it. Dall'Ora et al. (2020) shared that research findings displaying increased workloads, low control over the work environment, insufficient staffing, and long work hours contributed to increased work-related burnout, all experienced during the pandemic. Laskowski-Jones & Castner (2022) explained that the current RN staffing challenges predate COVID-19 and that the more prominent challenges must be addressed. Focusing on building RN resilience rather than addressing the causative factors is short-sighted and will not solve the problems. As seen during the pandemic, the staffing challenges have only exacerbated throughout the crisis, leaving ICU RNs frustrated and angry.

At the pandemic's start, RNs stepped up and provided care for critically ill patients in their areas. No one expected that four years later, we would continue to face so many of these same challenges as the virus continues to impact areas of the globe. It has been my honor to share the stories of these seven brave professionals and to help illuminate the many challenges they face. We must continue this work and strengthen our critical care nursing force, as our future depends on it.

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Appendix A: Recruitment Flyer

Are you an ICU RN who cared for COVID-19 Patients during all phases of the Pandemic?

Trixie Harris, a PhD candidate at Walden University is conducting a qualitative study, seeking RN's interpretation of their lived experiences of caring for COVID-19 patients, while working in rural community hospitals in the United States.

The study will involve a 30–45-minute recorded interview via Zoom conferencing. Participation is strictly voluntary and confidential. Participants may withdraw at any time.

Inclusion Criteria includes:

1-RNs working in ICU for three years or more before the start of the pandemic.

2-RNs who continue to work in the ICU during all phases of the pandemic.

3-RNs working in rural hospital systems, non-university affiliated facilities.

Please contact Trixie Harris
If you would like to participate.

Thank you

Appendix B: Interview Plan

Date: _____ Study Identifier: ___RN#_____

Age: _____Gender: _____

General geographic area: _____

Years as RN: _____Years as ICU RN: _____

CCRN: Yes No

Education: ADN BSN MSN Other_____

Time started: _____ Time finished: _____

Total interview time: _____

Please share as much detail as you wish to answer the following questions.

1- Please share your interpretation of your lived experiences while working in ICU during the pandemic, specifically caring for COVID-19 patients. How did self-efficacy and work-life balance impact your experiences during this time?

2-What, if anything, do you feel could have been done differently or handled differently during the pandemic by any entity, hospital, government, the community? Please share your thoughts.

3-Did you experience any signs of burnout at any time during your experience and how were you able to cope with these changes? How are you doing now?

4-What is your current view or feeling toward your own career longevity, and how has that changed since before the pandemic?