The University of Southern Mississippi

The Aquila Digital Community

Dissertations

Spring 5-12-2022

The COVID-19 Experience: An Intensive Care Nursing Perspective

Adrianna Watson

Follow this and additional works at: https://aquila.usm.edu/dissertations

THE COVID-19 EXPERIENCE:

AN INTENSIVE CARE NURSING PERSPECTIVE

by

Adrianna Lorraine Watson

A Dissertation
Submitted to the Graduate School,
the College of Nursing and Health Professions
and the School of Leadership and Advanced Nursing Practice
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

Approved by:

Dr. Debra Copeland, Committee Chair
Dr. Bonnie Harbaugh
Dr. Marti Jordan
Dr. Lachel Story

May 2022

Published by the Graduate School

THE UNIVERSITY OF
SOUTHERN
MISSISSIPPI®

ABSTRACT

In December 2019, a new virus reared its head and within a matter of months demanded the attention of the world as health care was challenged to full capacity. Frontline healthcare workers struggled to care for the patient after patient with limited knowledge of pathophysiology, risk of contagion, and resources. As the waves of patients became increasingly critical, the task of everyday human connection and care, as well as extraordinary life-saving measures, fell upon the shoulders of intensive care nurses. Little is known about how these nurses understand their experiences caring for patients with the novel coronavirus, or how their understanding translates to what it means to them to be an intensive care nurse during a pandemic. This study explored the lived experiences of intensive care nurses caring for patients infected with COVID-19 using interpretive phenomenology and hermeneutic philosophy.

The findings of this study revealed that these nurses have vital information regarding the lived experience, meaning, and effects of caring for patients during the COVID-19 pandemic. Implications of this study suggest that the lived experience of ICU nurses holds significant insights for immediate application into nursing care, nursing education, and medical leadership. Ongoing attention to the experience of those in the nursing profession is needed to ensure the longevity and integrity of the profession itself.

ACKNOWLEDGMENTS

DEDICATION

This work would not have been possible without the ongoing contributions of my village.

To my husband, your support made me braver, stronger, and better.

To my little one, you gave me hope for a bright future. I cannot wait to meet you.

To my family, you were my reason to keep fighting.

To my friends and colleagues, your light, strength, & laughter sustained me through it all.

To my nursing students, past, present, and future, this work is for you.

Go change the world.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ILLUSTRATIONS

LIST OF ABBREVIATIONS

AACN   American Association of Critical Care Nurses

ANA   American Nurses Association

BIPAP   Bilevel Positive Airway Pressure

CDC   Centers for Disease Control

COVID-19   The Novel Coronavirus

ECMO   Extracorporeal Membrane Oxygenation

GAD   Generalized Anxiety Disorder

FLWs   Frontline Healthcare Workers

HFN   High Flow Nasal Cannula

ICU   Intensive Care Unit

ICN   International Council of Nurses

PTSD   Post-Traumatic Stress Disorder

SCCM   Society of Critical Care Medicine

SIG   SARS-CoV-2 Interagency Group

USM   The University of Southern Mississippi

WHO   World Health Organization

CHAPTER I - INTRODUCTION

As the entrance of the novel coronavirus (COVID-19) sent shockwaves through the world, the demand for efficient, quality care increased dramatically for ICU nurses (Johnson & Parreco, 2020). Despite continued reliance on the physical, mental, and emotional endurance of these nurses during the pandemic, little is known about the perspective and meaning they ascribe to their experiences caring for COVID-19 patients (Alrhabi et al., 2020). Current literature has only begun to identify the multitude of effects that are arising as a result of chronic exposure to caring for patients with COVID-19 in frontline healthcare workers (FLWs) and, in particular, intensive care unit (ICU) nurses.

ICU nurses are the eyes and ears of the medical profession and serve as first responders to changes in already-critical patient conditions at inpatient bedsides (Johnson & Parreco, 2020). The responsibilities of the ICU nurse encompass both anticipating and meeting the physical and mental human needs of their patient (including hygiene, activity, nutrition, emotional and social support), as well as incorporating the patient in key decisions about the type, timing, and delivery of their care (Montauk & Kuhl, 2020). The role of the ICU nurse also extends to supporting and keeping the family of this patient informed and involved in the plan of care. ICU nurses caring for patients with COVID-19 assume all these roles and responsibilities with the added weight of the patient's isolation from family, and likewise, the patient's designated medical power of attorney being forbidden from the bedside. These requirements severely complicate any medical decisions in real-time by blinding the patient's support system from tangible

information and evidence regarding the patient's current state (Alrhabi et al., 2020;

Johnson & Parreco, 2020; Montauk & Kuhl, 2020).

COVID-19 has been identified as having a significant impact on the risk of

burnout in nurses caring for affected patients and their families (Garcia & Calvo, 2020).

COVID-19 has also been cited in multiple studies as a cause of increased stress, fear,

anxiety, and feelings of loss of control in FLWs (Bennett et al., 2020; Galehdar et al.,

2020; Gordon et al., 2021; Tosepu et al., 2021). Physical and psychological impacts

identified in nurses caring for patients with COVID-19 have included changes in sleep

patterns, increased diagnoses of generalized anxiety, depression, post-traumatic stress

disorder (PTSD), and extended to somatic symptoms (Master et al., 2020). More research

is needed on the effects that caring for patients with COVID-19 has had on the

experiences of ICU nurses and their understanding of what it means to be an ICU nurse

during the pandemic (Bennett et al., 2020; Galehdar et al., 2020; Gordon et al., 2021;

Montauk & Kuhl, 2020; Tosepu et al., 2021). Therefore, this study will provide nurses

with a better understanding of how caring for the patient with COVID-19 may have been

interpreted through the eyes of the ICU nurse in terms of the lived experience (Galehdar

et al., 2020; Gordon et al., 2021).

<center>Problem Statement</center>

Few studies have specifically focused on ICU nurses caring for COVID-19

patients, and none to date have attempted an interpretive study to enhance understanding

of these perspectives (Alhrabi et al., 2020; Gordon et al., 2021). Furthermore, the diverse

locations of these studies provided a wide range of cultural differences, and the lived

experience of ICU nurses exclusively within the United States had yet to be explored

<center>2</center>

(Gordon et al., 2021). These frontline nursing professionals have spent over a year gathering valuable experience and understanding which is crucial to share in order to promote professional and personal growth in the nursing field (Ardbili et al., 2020; Bennett et al., 2020; Demirci et al., 2020; Galehdar et al., 2020; Gao et al., 2020; Garcia & Calvo, 2020; Johnson & Parreco, 2020; Master et al., 2020; Montauk, 2020; Munawar & Choudry, 2021; Tosepu et al., 2021).

The goal of this study was to achieve and disseminate a greater level of understanding regarding how caring for the patient with COVID-19 was experienced by the ICU nurse during the pandemic as well as the meanings the ICU nurses ascribed to those experiences. The implications for this study may include providing valuable insight into the roles, responsibilities, and relationships of ICU nurses during a unique and historic period to better illuminate key nursing perspectives which may, in turn, be useful in the future for members of the nursing profession as well as for medical leaders, patients, and patient families (Alhrabi et al., 2020; Ardbili et al., 2020; Bennett et al., 2020; Demirci et al., 2020; Galehdar et al., 2020; Gao et al., 2020; Garcia & Calvo, 2020; Gordon et al., 2021; Johnson & Parreco, 2020; Master et al., 2020; Montauk, 2020; Munawar & Choudry, 2021; Tosepu et al., 2021).

Nature of the Study

This study is designed as a qualitative phenomenological interpretive study using hermeneutics as the underlying philosophy. The key principle of interpretive phenomenology methodology is to achieve a greater understanding of truth by illuminating core meanings emerging from within a given experience (Benner, 1994; Bontekoe, 1996; Jasper, 2004; Packer & Addison, 1989). The purpose of using this

3

methodology is to further elucidate the meaning of caring for patients with COVID-19 during the pandemic as experienced by ICU nurses. The sample population will consist of ICU nurses who have participated in the care of patients diagnosed with COVID-19. Online interviews will be used to record ICU nurses' retelling of the experience of caring for patients in critical condition with COVID-19. More information on the methodology of this study can be found in Chapter III.

Purpose of the Study

The purpose of this qualitative phenomenological interpretive study will be to explore the lived experience of ICU nurses caring for COVID-19 inpatients during the pandemic from December 2019 to January 2022. At this stage of the study, the lived experience will be defined as the emic perceptions and meanings ascribed to situations encountered by the ICU nurse in the act of being, being with others, and being with the world in the context of past, present, and future (Heidegger, 1972; Horrigan-Kelly et al., 2016). Based on the philosophical reflections of Heidegger (1972), this definition reflects what human beings view as their social reality, which is understood through encountering entities, equipment, and the world (Horrigan-Kelly et al., 2016; Patterson & Higgs, 2005).

Specific Research Questions

Research questions guiding this study include the following:

- What is the lived experience and meaning of being an ICU nurse caring for patients with COVID-19?

- What effect has caring for these patients had on ICU nurses' relationships with the self, their loved ones, their colleagues, and their patients?

Conceptual Philosophy and Methodology

The philosophy behind the design of this study was hermeneutics, and the methodology of this study was interpretive phenomenology (Benner, 1994). The existential emphasis for this approach is on both perceptions and subjective experiences (Butts & Rich, 2018). Hermeneutics in combination with interpretive phenomenology consists of a postmodernist approach that focuses on the participant as they live, interpret, and react to experiences. In this line of thought, the action represents value, and dialogue is the method by which different realities are shared (Butts & Rich, 2018; Heidegger, 1972). Particularly complementary to hermeneutics is the methodology of interpretive phenomenology; because of this, it was understood that hermeneutics served as a guiding philosophy to elicit core emerging concepts within data (Benner, 1994; Peoples, 2021).

According to Heidegger (1972), a hermeneutic inquiry was concerned with the *theory of being* in which understanding of being (*Dasein*) was the main focus and exists before reflection. Gadamer (1978) further expressed that the hermeneutic circle may never be closed, with ongoing understanding continuing in an eternal round. He presented the idea of a *fusion of horizons* in which the participant and researcher come together to merge understandings of past, present, and anticipated future (Gadamer, 1978; Heidegger, 1972; Horrigan-Kelly et al., 2016). Therefore, hermeneutics allowed for interpretive understanding based on the emic perspectives of ICU nurses caring for patients with COVID-19. Hermeneutics also allowed for a temporal context of past, present, and future to achieve a greater understanding of what it means to exist as an ICU nurse through everyday actions and interactions with other entities and the world (Heidegger, 1972; Horrigan-Kelly et al., 2016). The pandemic was a novel experience for

ICU nurses in a unique historical environment. There was no current established theory to accurately guide current research into their lived experiences; therefore, hermeneutics is relied on as the primary philosophy for a greater understanding of the phenomena being studied (Peoples, 2021; Polit & Beck, 2004).

Such analysis was achieved through the application of the hermeneutic circle (Benner, 1994). The use of the hermeneutic circle consisted of the researcher and participant engaging linguistically between the parts and the whole repeatedly to identify the emerging understanding (Heidegger, 1972; Paterson & Higgs, 2005). The phenomenon being studied (the lived experience of the ICU nurse) is whole because of the integration of each defining part. Likewise, the whole of the phenomenon provided contextual illumination for each individual part (Gadamer, 1978; Heidegger, 1972). The application of the hermeneutic circle helped identify core concepts and themes regarding the lived experience of ICU nurses caring for patients with COVID-19 (Peoples, 2021; Polit & Beck, 2004).

<div align="center">Operational Definitions</div>

- *Critical care nursing* originated with Florence Nightingale (1912), when nursing triage was first documented in order to provide close observation, procedures, and care to the sickest patients (Carter & Notter, 2020; Munro, 2010). The practice of grouping the most intensive patients together for more frequent observation and nursing care continued from 1850 on, but it was not until 1952 that critical care became recognized as a field of medical specialty (Carter & Notter, 2020). An outbreak of polio in 1952 created a massive influx of respiratory failure patients where one-medical-student to one-patient

care resulted in a 50% decrease in patient mortality; these results provided sufficient evidence that specialized intensive care promoted better patient outcomes (Carter & Notter, 2020).

- *A critical care nurse* is one who, regardless of their setting or unit, provides direct care for critically ill patients who are at an increased risk of potential or actual life-threatening medical conditions (American Association of Critical Care Nurses [AACN], 2019).

- *An ICU nurse* is a critical care nurse who provides specialized care to critically ill patients in either a general or specialized ICU in collaboration with the healthcare team (AACN, 2019).

- *Frontline healthcare workers (FLWs)* are defined as medical professionals who are in persistent contact with patients of suspected or known infection from COVID-19 from admission to discharge and are continually exposed to the mental and psychological hazards of caring for these patients (Galehdar et al., 2020).

- *The novel coronavirus (COVID-19)* is defined as a highly infectious disease transmitted by microdroplets via contact, droplet, and airborne methods and is associated with severe acute respiratory syndrome (SARS-CoV-2) (Centers for Disease Control [CDC], 2020; Villar et al., 2020). Incubation is thought to range between 2-14 days (CDC, 2020). The severity of infection varies (based on age, baseline health, and comorbidities) from asymptomatic or mild cold symptoms to multiple organ failure and death (CDC, 2020).

- *The COVID-19 pandemic* is defined as a global spread of the novel

  coronavirus (COVID-19). Global spread occurred due to the absence of

  established worldwide immunity (CDC, 2016). Measures taken to control the

  spread of this virus, such as regular temperature and symptom screening,

  social distancing, masking, and quarantine of suspected infectious individuals,

  led to an abrupt stop or severe impairment of most daily routines, interactions,

  and business operations (American Psychological Association [APA], 2020).

  Healthcare systems were overwhelmed by a sudden demand for ICU beds,

  critical care staff, and medical resources, including medications, supplies, and

  equipment vital to caring for these patients (Carter & Notter, 2020). As a

  result of the isolation and preventative measures, there was also an overall

  decrease in mental health as feelings of fear, anxiety, depression, boredom,

  anger, frustration, irritability, mistrust, and stigmatization rose (APA, 2020).

- *Lived Experience* consists of the interactions and meanings ascribed to a

  phenomenon as constructed, understood, and expressed by the participant

  within the context of past, present, and future (Benner, 1994).

- *Theory of Being* is defined as Being (or *Dasein*) consists of 3 parts in which

  participants attune to their pasts, verbalize the present situation, and look

  forward to the possible future (Heidegger, 1972; Horrigan-Kelly et al., 2016;

  Paterson & Higgs, 2005).

- *Fusion of Horizons* is a state in which the participant and researcher come

  together to merge understandings of past, present, and anticipated future

  (Gadamer, 1978; Heidegger, 1972; Horrigan-Kelly et al., 2016).

8

- *Interpretive Phenomenology* is a postmodernist, existential methodology for understanding the meaning ascribed to a phenomenon by the participant (Benner, 1994).

- *Hermeneutics* is a philosophy originating from ancient Greece in which textual interpretations aid in the development of an enhanced understanding of a specific phenomenon based on common cultural beliefs, practices, concerns, or meanings (Benner, 1994).

- *Hermeneutic Circle* consists of the researcher and participant engaging linguistically between the parts and the whole repeatedly to identify an emerging understanding (Heidegger, 1972; Paterson & Higgs, 2005).

Assumptions, Limitations, Scope, and Delimitations

Due to the qualitative nature of this study, several key assumptions were made and limitations were acknowledged which reflected both the nature of the hermeneutic approach and the lens of the lived experience. One such assumption is that ICU nurses ascribed any meaning at all to the experience of caring for patients with COVID-19. Potential weaknesses of this study included subjectivity of memory recall, a general hesitancy which may be present in recounting experiences on the part of the ICU nurses, and a potential for high levels of diversity based on geographical region, the experience level of nurses, and personal relationships and/or coping mechanisms.

The bounds of this study were limited to perceived meanings of changes reflecting the impact of caring for patients with COVID-19 during the pandemic between December 2019 and February 2022 on relationships held by ICU nurses with the self, loved ones, colleagues, patients, and the healthcare organization. Delimitations were that

this included neither statistical analysis of participant perceptions for correlation or causation nor any critique of either individual or organizational responses to the COVID-19 pandemic. The nature of this study was strictly exploratory and does not seek to place emphasis or pass judgments on the perceptions and meanings of either positive or negative responses in this critical context.

<center>Significance of the Study</center>

This study holds significance for nurses, nursing students, nurse educators, nurse managers, and healthcare administration, as well as any member of the population who may experience hospitalization relating to COVID-19 (Alharbi et al., 2020; Aredbili et al., 2020; Demirci et al., 2020; Johnson & Parreco, 2020; Montauk & Kuhl, 2020; Munawar & Choudry, 2021). Professional application may be achieved through pursuing a greater understanding of the emic perspectives and related interpretations of the lived experience of the ICU nurse at this time, which provided a crucial missing piece to the pandemic puzzle of nurses caring for patients with COVID-19 (Gordon et al., 2021).

The majority of current academic literature reflected findings from the first few months of the pandemic, and therefore continued investigation has the ability to generate new knowledge (Bennett et al., 2020; Galehdar et al., 2020; Garcia & Calvo, 2020; Gordon et al., 2021; Master et al., 2020; Tosepu et al., 2021). At this time, many changes were taking place, but care processes and medical approaches were largely new and under constant development (Alharbi et al., 2020; Gao et al., 2020). There was also no vaccine publicly available in any nation at this time (World Health Organization [WHO], 2021b). Changes which are identified now are likely to be the result of long-term care of COVID-19 patients and not a temporary adaptation to a worldwide crisis (Garcia &

Calvo, 2020; Gordon et al., 2021). The results of this study may provide an opportunity for enhanced social and cultural change through greater understanding and thereby allow for a better professional quality of life and nursing care in the future (Gordon et al., 2021; Tosepu et al., 2021).

Summary

The COVID-19 pandemic presented a new set of opportunities for learning and growth in both a personal and professional sense for individuals on a global scale, but arguably for none more so than the ICU nurse (Alhrabi et al., 2020; Gordon et al., 2021). The opportunity for knowledge generation, professional application, and the pursuit of enhanced understanding in the world of social change may be realized through active exploration of the meanings generated in the lived experience of the ICU nurse (Benner, 1994; Johnson & Parreco, 2020). This study seeks to explore the lived experience and interpret the common meanings and beliefs generated through the lens of firsthand accounts from frontline ICU nurses (Benner, 1994). In Chapter II, a review of the current literature regarding the experiences and effects of FLWs and ICU nurses caring for patients with COVID-19 during the pandemic will be discussed.

CHAPTER II – LITERATURE REVIEW

Introduction

The purpose of the literature review was to examine established data that reflects findings related to the worldwide experience of frontline healthcare workers (FLWs) in caring for patients with COVID-19. The literature review spanned several databases and used multiple keywords in order to obtain the most applicable results over a broad range of topics. The databases used included *CINAHL Plus*, *PubMed*, and *MEDLINE* (*EBSCOhost*); these databases were chosen to ensure sources were from professional, peer-reviewed academic journals, and thereby represented the most up-to-date and accurate information on current literature at the time of this review (Creswell & Creswell, 2018).

Keywords used to find applicable sources included the following: COVID-19, novel coronavirus, pandemic, intensive care, intensive care nurses, intensive care nurse relationships, critical care nurses, frontline healthcare workers, hospital, pandemic, quantitative, and qualitative. These keywords were chosen to best identify the significant effects of caring for patients with COVID-19 during the pandemic on FLWs in order to illuminate potential focus points for intensive care unit (ICU) nurse participants (Johnson & Parreco, 2020). Articles from the past two years were used for the literature search, except for a few seminal articles. These articles provided current information on the needs of ICU nurses who delivered care to patients during the pandemic. By reviewing the literature on this topic, a gap in the current literature was identified, specifically on how ICU nurses experienced caring for patients with COVID-19 during the pandemic.

COVID-19 Overview

COVID-19 is a highly infectious new coronavirus associated with severe acute respiratory syndrome (SARS-CoV-2) and can ultimately result in multi-organ system failure and death (CDC, 2020; Villar et al., 2020). The first outbreak of COVID-19 was reported in Wuhan, China on December 31st, 2019 (Villar et al., 2020). Less than three months later, on March 11, 2020, the World Health Organization (WHO) declared it to be a worldwide pandemic due to its rapid spread (Cucinnoti & Vanella, 2020). Nine months following, the first vaccine was approved for emergency use in the United States on December 11th, 2020. After eight months of emergency use, the U.S. Food and Drug Administration (2021) fully approved the first vaccine for individuals over sixteen years of age on August 23rd, 2021. As of September 2021, there have been globally 223,022,538 confirmed cases of COVID-19, with 4,602,882 deaths (WHO, 2021a). To combat the rising numbers of the virus in the world, 5,352,927,296 vaccine doses were administered during 2021 (WHO, 2021b). In the United States, the rate of COVID-19 infections reported to the Centers for Disease Control and Prevention (2021) experienced two significant spikes, the first between November 2020 through March 2021, and then again between June 2021 through October 2021, as reflected in Figure 1.

Daily Trends in Number of COVID-19 Cases in The United States Reported to CDC
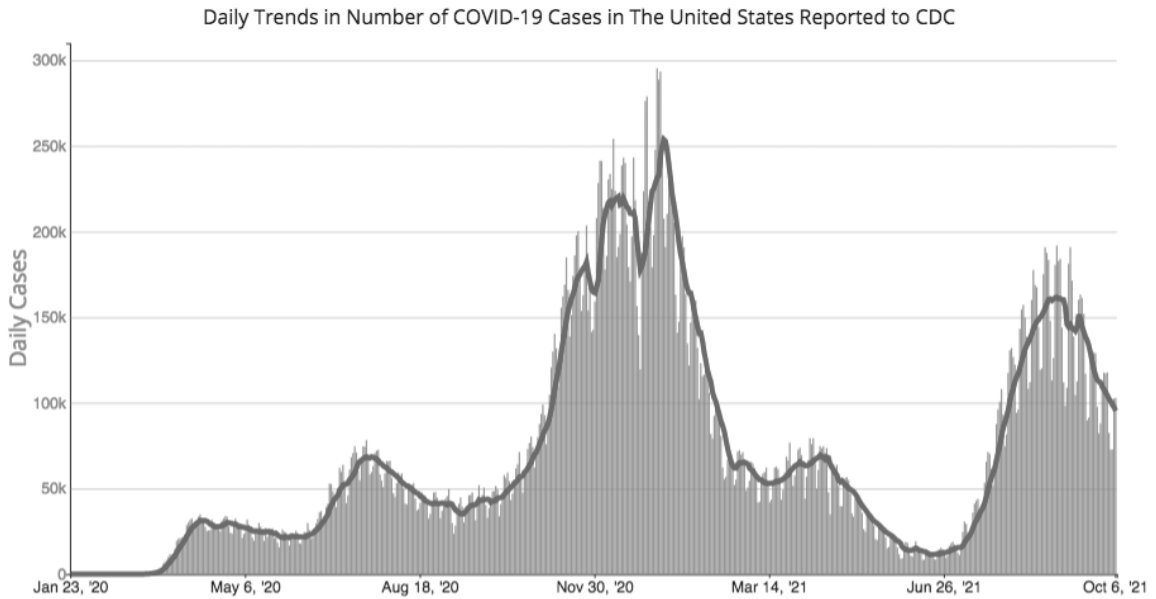
Figure 1. Daily Trends in Rate of COVID-19 Cases.

(CDC, 2021b).

New variants of COVID-19 were developing at a rapid pace, and the U.S. government SARS-CoV-2 Interagency Group (SIG) was tracking variants under monitoring, variants of interest, and variants of concern (CDC, 2021d). Variants could result in an enhanced ability to infect and transmit viral load. Total deaths from COVID-19 in the U.S. were last reported at 707,065 out of 43,997,504 infections (CDC, 2021c). These deaths are reflected geographically as reported to the CDC in Figure 3.

Total Number of COVID-19 Deaths in the US Reported to the CDC, by State/Territory

Territories

| AS | FSM | GU | MP | PW | RMI | VI |

Total Deaths

Data not available | 0 - 813.0 | 1.0k - 3.2k | 3.8k - 6.7k | 7.2k - 11.7k | 12.8k - 26.8k | 27.5k - 69.2k
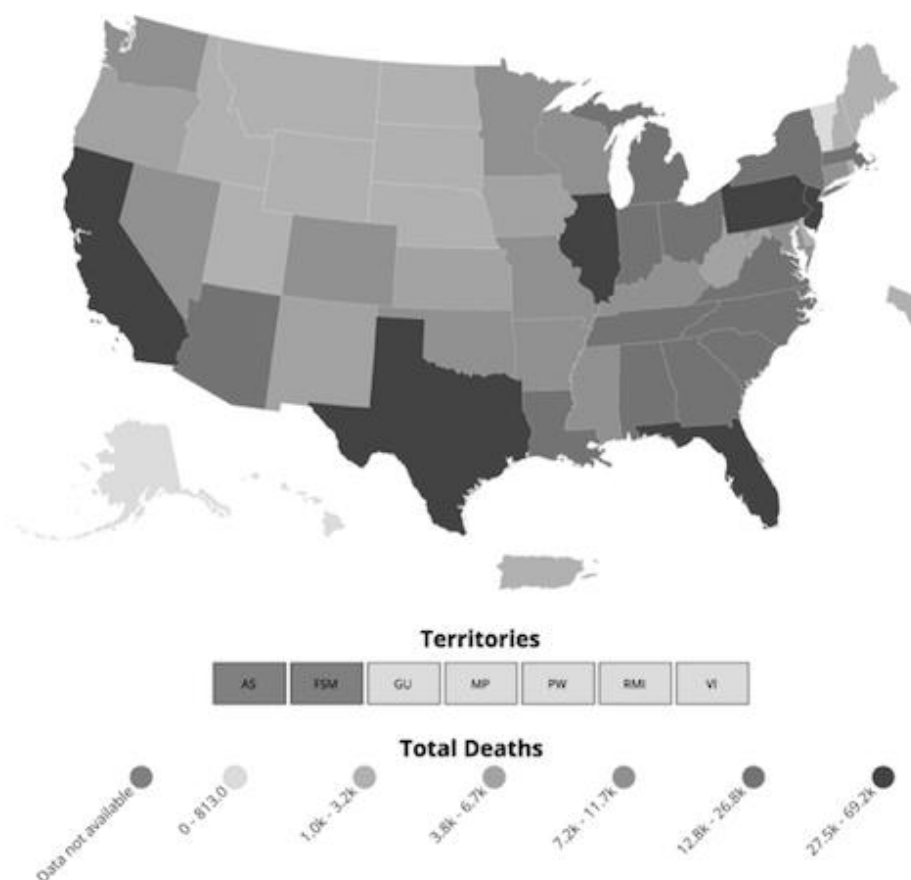
Figure 2. Total Deaths Related to COVID-19 in the U.S. per CDC Report.

(CDC, 2021d).

As patients were admitted to the hospital with COVID-19, there was also an increase in challenges in hospital workflow, staffing, and resources. Patients with COVID-19 escalated readily to critical conditions and typically required a longer length of stay than a standard ICU patient. Such variables had the potential to influence the time and quality of care the ICU nurse could give patients, and as a result could have affected the professional quality of life (Antonijevic et al., 2020; Bennett et al., 2020; Galehdar et

15

al., 2020; Garcia & Calvo,2020; Hoernke et al., 2021; Li et al., 2020; Lorente et al., 2020; Master et al., 2020; Roberts et al., 2021; Ruiz-Fernandez et al., 2020; Song & McDonald, 2020; Tosepu et al., 2021).

<center>Therapeutic Approaches to COVID-19</center>

Treatment for COVID-19 infection remained largely supportive (CDC, 2021a; National Institutes of Health [NIH], 2021). As of September 2021, an antiviral medication called Remdesivir was the only medication fully approved by the Food and Drug Administration and was used to slow viral replication and spread within infected patients (CDC, 2021a; NIH, 2021). Therapeutic approaches for the many other treatments undergoing clinical trials included either supporting or suppressing the immune response (CDC, 2021a; NIH, 2021).

Patients who were hospitalized with COVID-19 often experienced complications of the heart, lungs, kidneys, brain, eyes, gastrointestinal tract, blood vessels, and skin (CDC, 2021a). These patients appeared to be significantly vulnerable to blood clots and often required high doses of blood-thinning medication along with preventative therapies and devices to prevent life-threatening complications relating to the infection (Biswas et al., 2021; CDC, 2021a). Additionally, patients with COVID-19 often experienced emergent increases in their oxygen needs (CDC, 2020; Gershengorn et al., 2021). Hospitalized patients with COVID-19 often progressed from a simple nasal cannula to a high flow nasal cannula (HFNC); then to pressure support through noninvasive ventilation, and finally to invasive ventilation using an endotracheal tube and mechanical ventilation (Gershengorn et al., 2021). Some cases required the use of extracorporeal

<center>16</center>

membrane oxygenation (ECMO) in which a machine was used to replace the function of both heart and lungs (American Thoracic Society [ATS], 2016).

<center>FLWs and ICU Nurse Perspectives on COVID-19</center>

Intensive care unit (ICU) nurses provided care to critically ill and actively contagious patients and were consistently exposed to the central aspects of responding to one of the most severe and longest worldwide public health emergencies in the past 100 years (Latvala et al., 2021). ICU nurses were considered FLWs because the majority of patients admitted to the hospital were routed to the intensive care unit due to complications regarding hypercoagulable state and steadily increasing oxygen needs. These nurses were in persistent contact with patients of suspected or known infection from COVID-19 from admission to discharge, and they were continually exposed to the mental and psychological hazards of caring for these patients (Galehdar et al., 2020).

However, in the literature, little was known about the experiences of ICU nurses who are taking care of COVID-19 patients. Therefore, the study was designed to examine the experiences of these ICU nurses as they delivered care to patients during the pandemic and address the gap in the current research. For this literature review, literature on FLWs was also used to examine the effects of caring for patients with COVID-19. As a possible solution to this gap, current research data in the academic discipline seemed to support the use of interpretive phenomenology in exploring the lived experiences of ICU nurses caring for patients with COVID-19 during the pandemic (Antonijevic et al., 2020; Bennett et al., 2020; Galehdar et al., 2020; Garcia & Calvo,2020; Hoernke et al., 2021; Li et al., 2020; Lorente et al., 2020; Master et al., 2020; Roberts et al., 2021; Ruiz-Fernandez et al., 2020; Song & McDonald, 2020; Tosepu et al., 2021).

<center>17</center>

Problem Statement and Research Question

Critical care nurses were pivotal during the pandemic in providing groundbreaking medical care on the frontline; however, little is known about how ICU nurses viewed these experiences and what meaning was drawn from the lived experience of caring for patients with COVID-19. This review was designed to ascertain what has been established thus far about the effects of caring for patients with COVID-19 on FLWs, with the goal of guiding this study to focus on relevant aspects of the lived experience for ICU nurses. Current research findings suggested that there were significant effects on FLWs as a direct result of caring for affected patients and their family members during the pandemic (Antonijevic et al., 2020; Galehdar et al., 2020; Gordon et al., 2021; Li et al., 2020; Lorente et al., 2020; Master et al., 2020; Roberts et al., 2021; Ruiz-Fernandez et al., 2020; Tosepu et al., 2021).

Such evidence emphasized the value of firsthand experiences, as presented by ICU nurses in the critical care environment, for interpretation and deeper meaning. First, the evidence established that caring for patients with COVID-19 did have a significant impact on known FLWs (Bennett et al., 2020). Second, the established effects on FLWs had been shown to impact both the personal and professional behaviors of FLWs (Galehdar et al., 2020; Lorente et al., 2020; Tosepu et al., 2021; Villar et al., 2020). Finally, the unique nature of the ICU nurse experience suggested interpretation may impact both academic and professional understanding and application in nursing practice (Gordon et al., 2021; Villar et al., 2020).

Specific Research Questions

Research questions guiding this study included the following:

- What is the lived experience and meaning of being an ICU nurse caring for patients with COVID-19?

- What effect has caring for these patients had on ICU nurses' relationships with the self, their loved ones, their colleagues, and their patients?

Since the review of the literature was limited regarding ICU nurses, this review compared current information on the lived experiences of FLWs with what was known about ICU nurses, emphasizing the effects of caring for patients during COVID-19 on themselves, their loved ones, their colleagues, and their patients.

<div align="center">Lived Experience of FLWs During COVID-19</div>

Phenomenology has been used to explore the lived experience of deployed frontline nurses (n=30) in caring for patients with COVID-19 from a qualitative perspective in a designated COVID-19 facility (Villar et al., 2020). Interpretive phenomenology was chosen in order to focus on the personal perspectives of frontline nurses in Qatar. The open-ended questions used in this study included exploration of the following subjects:

- What was your experience caring for patients with COVID-19?

- Describe differences between caring for patients in a COVID-19 facility and your prior work environment?

- What thoughts, feelings, processes, & emotions did you experience while caring for these patients?

- How did you cope during the COVID-19 pandemic?

Themes from this study included the challenges and experience of working in a new environment with limited orientation, being worn down from the workload, struggles relating to caring for patients while wearing personal protective equipment, fear of contracting COVID-19, witnessing suffering in patients, surviving, and a new sense of purpose. Insights provided by the nurses revealed that these participants considered themselves as carriers of COVID-19 and altered many of their own behaviors interacting with others. As a result of this belief, nurses wanted to protect themselves, their loved ones, and their colleagues. This study provided important information on the experiences of ICU nurses and the possibility of changes in their own relationships while caring for patients with COVID-19 (Villar et al., 2020). The findings of this study supported using interpretive phenomenology to identify novel concepts emerging in the data regarding the lived experience of ICU nurses caring for patients with COVID-19 (Peoples, 2021).

Changes in Relationships with the Self: FLWs

Several studies illustrated that little was known about how caring for patients with COVID-19 affected FLWs themselves. These effects were documented as both physical and emotional in nature through the presence of a variety of psychological manifestations (Gordon et al., 2021; Liu et al., 2020). FLWs experienced fear regarding the possibility of becoming infected as a result of caring for these patients and struggled with the ability to surrender these concerns (Tosepu et al., 2021). As a result of caring for patients with COVID-19, FLWs expressed feelings of shock and secondary trauma (Bennett et al., 2020). When established coping strategies failed, many found themselves experiencing new needs for enhanced coping in the face of unprecedented challenges (Galehdar et al., 2020). Despite concerns for their own safety, FLWs continued to provide care to infected

and infectious patients while grappling with the fear of contracting the virus themselves (Hoernke et al., 2021; Song & McDonald, 2020).

More than 25% of participants in one quantitative study reported experiencing a significant psychological impact as a direct result of caring for patients with COVID-19 (Master et al., 2020). This psychological tax wore on nursing professionals to the point that it was determined by Garcia and Calvo (2020) to be a statistically significant factor contributing to nursing burnout. Levels of compassion fatigue and burnout in FLWs were seen to rise in previously-tested populations of both physicians and nurses during care for patients with COVID-19 (Ruiz-Fernandez et al., 2020). ICU nurses communicated an intention to leave the profession of nursing due to feelings of being overworked, underprepared, unusually anxious, and/or depressed (Li et al., 2020; Lorente et al., 2020). Overall, current literature revealed that FLWs experienced greater levels of stress, depression, and anxiety than medical professionals who were not considered frontline or did not belong to the medical profession at all during this period (Antonijivec et al., 2020).

Intensive Care Nurses. Information exclusive to the ICU nurse is currently limited. However, a significant challenge of ICU nurses during this time is reported as feeling a psychological burden (Moradi et al., 2021). This burden has been attributed to chronic exposure to debilitating stressors, including poor staffing, fear of infection, social stigma, domestic distress, professional turmoil, witnessing suffering, and rampant distrust of medical authorities (Moradi et al., 2021; Villar et al., 2020). Further, internal and external factors affected nurses, and these effects are discussed in the following sections.

Internal Effects. Gordon et al. (2021) discovered that this population of critical care nurses also experienced the effects of isolation. Although some attributed this to social perceptions and mandates, many nurses considered themselves as personal carriers of disease. The emotional ramifications of this were manifold, including feelings of fear, anxiety, ethical stress, and depression (Bergman et al., 2021; Gordon et al., 2021; Latvala et al., 2021; Lissoni et al., 2020; Moradi et al., 2021; Villar et al., 2020). Caring for patients with COVID-19 augmented work-related stress, anxiety, and proximal mental illness (Latvala et al., 2021). Due to the emergent and critical nature of the outbreak, ICU nurses experienced an increased risk for post-traumatic stress disorder (PTSD), generalized anxiety disorder (GAD), and major depressive disorder (Lissoni et al., 2020). ICU nurses also reported finding a sense of purpose and calling in caring for these patients that at times made it difficult to prioritize others' needs (Villar et al., 2020).

External Effects. Patient handling in the complex care of acutely ill patients such as those with COVID-19 presents a greater burden on nurses to preserve patient functionality and prevent complications of limited mobility, such as pressure-related injuries, worsening patient outcomes, and mental decline (Latvala et al., 2021). These demands increased the already high risk of musculoskeletal work-related injuries for ICU nurses (Latvala et al., 2021). Studies also identified stress-related changes in ICU nurse eating and sleeping patterns while caring for patients with COVID-19 (Gordon et al., 2020; Villar et al., 2020; Xiao et al., 2020). Some ICU nurses experienced chronic fatigue, headaches, feeling exhausted during or at the end of their shifts (Gordon et al., 2021; Laudanski et al., 2021). The personal protective equipment was described by ICU nurses to contribute to feelings of discomfort and difficulty breathing (Gordon et al.,

2021). Biosensors have been used to attempt to quantify the increased demands of caring for patients with COVID-19 in the ICU (Laudanski et al., 2021). These efforts included tracking monitor changes in skin temperature, heart rate, respiratory rate, steps per shift, and energy expenditure of ICU nurses during their shifts with COVID-19 patients. Increased energy expenditure was attributed largely to wearing appropriate PPE during patient care (Laudanski et al., 2021).

Summary. These data suggest that caring for patients during the COVID-19 pandemic resulted in an overall increase in pressure and workload with fewer resources in a shorter amount of time, raising the ultimate cost of caring for ICU nurses (Latvala et al., 2021). ICU nurses have also expressed omnipresent guilt as they described how patients would die if the nurse could not get to them quickly enough (Gordon et al., 2021). Individuals experiencing such stressors often turn to internal resources (resilience) to cope; however, the magnitude, duration, frequency, and complexity of these stressors unique to caring for patients in an ICU setting has the potential to overwhelm any individual reserves without preventative and supportive intervention (Bergman et al., 2021; Lissoni et al., 2020).

Changes in Relationships with Loved Ones: FLWs

As discussed previously, little was known about the effects of caring for COVID-19 patients on the relationships of FLWs with their own family members and friends. However, there were a few reoccurring themes in current literature. The most widely noted was fear of spreading infection of the COVID-19 virus to family and friends (Antonijevic et al., 2020; Bennett et al., 2020; Galehdar et al., 2020; Gordon et al., 2021; Hoernke et al., 2021; Song & McDonald, 2020). Such fear manifested in FLWs avoiding

or hiding from their loved ones, and in some cases resulted in challenging or broken relationships with partners or spouses (Bennett et al., 2020; Song & McDonald, 2020). Nurses also shared experiences of separating themselves from their children in particular and the anguish of having those children not understand why (Galehdar et al., 2020). Other nurses reported new, bordering on obsessive, needs to communicate electronically with family members daily in order to establish their health and safety (Song & McDonald, 2020). Many FLWs reported the experience of facing a dilemma between choosing to protect their own families or provide care for patients with COVID-19 (Galehdar et al., 2020; Hoernke et al., 2021). One study reported that 70.4% of frontline physicians and 70.2% of frontline nurses experienced significant anxiety while simply thinking of the possibility of infecting their own family members and loved ones (Anotijevic et al., 2020). Nurses described the weight of fear relating to being a potential carrier to family members at home as omnipresent (Galehdar et al., 2021). Behaviors of extreme preparation before shifts and excessive disinfection after shifts became common daily routines for many nurses in order to decrease the risk of bringing home contagions (Song & McDonald, 2020).

Intensive Care Nurses. Feelings of intense anxiety and heightened stress in relation to being a source of increased exposure to their family members were also reported specifically by ICU nurses (Gordon et al., 2021). These nurses in particular expressed feelings of isolation and worried about who would provide for their families if they were unable to stay healthy while caring for such infectious and ill patients (Gordon et al., 2021). Participants reported feeling frightened to interact with friends or even go to the grocery store in case someone could suffer deadly consequences from being exposed

to them. These nurses also communicated an overall decrease in patience and tolerance of family members and friends at home while caring for patients with COVID-19 during the pandemic, creating new challenges at home (Gordon et al., 2021).

Changes in Relationships with Colleagues: FLWs

A significant factor influencing the relationship that ICU nurses may have experienced was a challenge in adequate resources to meet current patient demands. An inadequacy of appropriate personal protective equipment, ventilators, and medical staff forced many healthcare workers to become creative in finding methods to protect themselves and each other in ways never before seen in patient or nursing care (Tosepu et al., 2021). One recurrent theme regarding FLWs was an overall feeling of dedication and sacrifice on the part of the staff (Bennett et al., 2020). FLWs demonstrated herculean efforts to provide harder work in longer hours despite experiencing mounting challenges of resource scarcity and personal risk (Bennett et al., 2020). One study reported that FLWs experienced extreme guilt when allowed to take breaks from their work because it would be a waste of personal protective equipment and increase demands on their team members (Hoernke et al., 2021). Many even reported intentionally dehydrating themselves during shifts to prevent the need to take breaks or go to the bathroom (Hoernke et al., 2020). Frontline nurses also expressed experiencing crises relating to short staffing, where even more patients were added to already exhausting workloads with limited resources (Galehdar et al., 2020).

Intensive Care Nurses. The ICU was no exception to monumental changes in staff relations during the pandemic. Personal priorities shifted as these nurses began to view themselves as part of a crucial response to the pandemic (Gordon et al., 2021). ICU

nurses expressed worry over the deadweight their absence would have on their nursing team if they were to fall ill as a result of caring for patients with COVID-19 (Gordon et al., 2021). Others expressed a shift in primary support systems as they found their team a safe place to share feelings, decompress, and experience new challenges and hardships side by side (Gordon et al., 2021). One study found that these frontline nurses found their greatest source of support in their nursing colleagues (57%), followed by their nursing managers (47%), and attributed this to shared emotional values (Song & McDonald, 2020).

Changes in Relationships with Patients: FLWs

The relationship that FLWs held with their patients and their patients' family members also was shown to have shifted drastically during the COVID-19 pandemic (Bennett et al., 2020). Traditional nursing roles were expanded as visitors for patients were no longer allowed. Bedside nurses in already compressive scenarios became not only nurses but also family members and friends to these isolated patients (Bennett et al., 2020; Song & McDonald, 2020). One qualitative study examined the theme of encountering patients of an unknown infectious status who would lie to healthcare workers about their knowledge of possible infection out of fear of facing isolation or a decrease in their quality of care (Tosepu et al., 2021). Nurses also communicated feeling traumatized as they had to explain to the patient's family members over the phone that their loved one had passed away or holding an iPad so family members could witness a patient passing (Bennett et al., 2020).

Intensive Care Nurses. ICU nurses expressed the challenges of serving as a surrogate for patients' family members and feeling unable to provide the basic

connections that patients needed in order to feel comforted (Gordon et al., 2021).

According to nurses, the perceived distance between nurses and patients seemed daunting

and discouraging in such a critical setting. Often, after grueling shifts, nurses expressed

that the outcome of care was that patients were slowly and ultimately dying (Bennett et

al., 2020; Gordon et al., 2021).

Potential Themes and Perceptions

These studies illustrated the potential for the impact of change relating to COVID-

19 and any future emergency disease response, which may hold valuable meaning for

ICU nurses as well as the entire nursing profession. Findings in the current literature

provided further information and insights for factors that affected relationships between

medical professionals and the patients, their family members, the healthcare team, the

environment, friends, family members, and relationships within the self (Antonijevic et

al., 2020; Bennett et al., 2020; Galehdar et al., 2020; Garcia & Calvo,2020; Hoernke et

al., 2021; Li et al., 2020; Lorente et al., 2020; Master et al., 2020; Roberts et al., 2021;

Ruiz-Fernandez et al., 2020; Song & McDonald, 2020; Tosepu et al., 2021).

Intrinsic Intrapersonal Change. One potential theme was a change in the

intrapersonal relationship of the ICU nurse. Such intrapersonal changes are evidenced in

other studies through themes of anxiety, stress, depression, coping mechanisms, and

overall resilience during this time (Antonijevic et al., 2020; Galehdar et al., 2020; Garcia

& Calvo, 2020; Gordon et al., 2021; Li et al., 2020; Lorente et al., 2020; Master et al.,

2020; Roberts et al., 2021; Ruiz-Fernandez et al., 2020; Tosepu et al., 2020; Vallar et al.,

2020). These changes had the potential to alter normal cognitive and emotional

perspectives in regards to the self (Bennett et al., 2020; Gordon et al., 2021; Tosepu et al., 2020; Vallar et al., 2020).

Extrinsic Interpersonal Change. Another potential theme was based on several studies which discussed changes that ICU nurses experienced that may have affected their relationships with their own family members or friends. The extrinsic interpersonal change was evidenced by behaviors such as distancing before or after work and even quarantining away from loved ones to protect them from unnecessary exposure to potential pathogens (Bennett et al., 2020; Garcia & Calvo, 2020; Master et al., 2020; Roberts et al., 2021; Song & McDonald, 2020; Tosepu et al., 2021). Changes in the nature and frequency of ICU nurse interactions with loved ones may have contributed to changes in the quality and strength of key supportive relationships (Bennett et al., 2020; Gordon et al., 2021; Tosepu et al., 2020; Vallar et al., 2020).

Finally, other potential themes were noted based on changes in relationships with the patient and the healthcare team during the COVID-19 pandemic. (Bennett et al., 2020; Galehdar et al., 2020; Garcia & Calvo, 2020). These included effects of personal protective equipment, enhanced isolation to control infectious contaminants, alterations in workload size and intensity. One final potential theme was the need for sacrifice and dedication on the part of individual team members. Each theme had the potential to alter the current understanding of patient care and healthcare team dynamics within the context of the COVID-19 pandemic (Lorente et al., 2020; Master et al., 2020; Roberts et al., 2021; Song & McDonald, 2020). Specifically, in an ICU setting, it may have been found that nurse-patient relationship and their families and friends were perceived as influential

in the lived experience of caring for patients with COVID-19 (Gordon et al., 2021; Vallar et al., 2020).

<center>Major Ideas of Themes in Current Research</center>

The major idea behind the themes identified in current literature seemed to reflect an overarching concern with change; this idea was framed within hermeneutics to assist in finding emerging themes (or meanings) within this study (Benner, 1994; Heidegger, 1927). Specifically, in each study, the concern for change was brought about as a result of the demands brought on by the COVID-19 pandemic (Antonijevic et al., 2020; Bennett et al., 2020; Galehdar et al., 2020; Garcia & Calvo,2020; Hoernke et al., 2021; Li et al., 2020; Lorente et al., 2020; Master et al., 2020; Roberts et al., 2021; Ruiz-Fernandez et al., 2020; Song & McDonald, 2020; Tosepu et al., 2021). These themes were further categorized by hermeneutic phraseology according to Heidegger (1927) into terms of *Dasein* as a relational being in the world, relational interactions with *das Man,* and the reflection within the relationship of being within the pandemic as experienced by the ICU nurse (Benner, 1994). Common concepts and themes emerging from the triangulation of this data with participant interviews may have highlighted a new understanding of lived experiences of these nurses at this historical point in time (Peoples, 2021).

<center>Literature Gap</center>

Upon assessment, the gaps in current literature could be related to the lived experience of ICU nurses caring for patients with COVID-19, as well as the changes in how these nurses related to themselves and others after an approximate year of assimilation into the new normal of patient care (Antonijevic et al., 2020; Bennett et al., 2020; Creswell & Creswell, 2018; Galehdar et al., 2020; Garcia & Calvo,2020; Hoernke

et al., 2021; Li et al., 2020; Lorente et al., 2020; Master et al., 2020; Roberts et al., 2021; Ruiz-Fernandez et al., 2020; Song & McDonald, 2020; Tosepu et al., 2021). The majority of current academic literature reflected findings from the first few months of the pandemic (Antonijevic et al., 2020; Garcia & Calvo, 2020; Li et al., 2020; Lorente et al., 2020; Master et al., 2020; Roberts et al., 2021; Ruiz-Fernandez et al., 2020). At this time, many changes were taking place, but care processes and medical approaches were largely new and under constant development (Alharbi et al., 2020; Gao et al., 2020). There was also no vaccine publicly available in any nation at this time (WHO, 2021). Changes in medical care are likely to be the result of long-term care of COVID-19 patients and not a temporary adaptation to a worldwide crisis (Garcia & Calvo, 2020; Gordon et al., 2021).

Summary

The review of the current literature on the medical profession during the COVID-19 pandemic appeared to present supporting evidence that the effects of caring for COVID-positive patients and their family members had a significant effect on the nursing population, amongst other medical professionals (Antonijevic et al., 2020; Bennett et al., 2020; Creswell & Creswell, 2018; Galehdar et al., 2020; Garcia & Calvo,2020; Hoernke et al., 2021; Li et al., 2020; Lorente et al., 2020; Master et al., 2020; Roberts et al., 2021; Ruiz-Fernandez et al., 2020; Song & McDonald, 2020; Tosepu et al., 2021). The organization of this review presented a relationship to the proposed study problem statement and research questions, summarized qualitative and quantitative research supporting the use of interpretive phenomenology, compared and contrasted research outcomes against the design of this study, and identified overall ideas behind themes and potential themes to be addressed. In addition, this review presented a literature gap that

supported the need for the proposed study and added to the body of knowledge regarding the experience of ICU nurses during the COVID-19 pandemic.

What remained to emerge in the academic literature was research on the meaning that ICU nurses had ascribed to their experiences of caring for critically ill patients with COVID-19 during the pandemic. The results of this study provided an enhanced understanding of the nursing perspective of caring for patients with COVID-19 during the pandemic and subsequently allowed for better medical preparedness and training, professional quality of life, and delivery of nursing care in the future (Antonijevic et al., 2020; Bennett et al., 2020; Galehdar et al., 2020; Garcia & Calvo,2020; Hoernke et al., 2021; Li et al., 2020; Lorente et al., 2020; Master et al., 2020; Roberts et al., 2021; Ruiz-Fernandez et al., 2020; Song & McDonald, 2020; Tosepu et al., 2021). In Chapter III, the design and methods for conducting this study are discussed.

CHAPTER III - METHOD AND DESIGN

Introduction

Chapter III presents the design of the research methodology, the rationale for the underlying philosophy, and the role of the researcher. The context of the participant selection and sampling, instrumentation, and research procedures are also discussed. Finally, ethical considerations are reviewed. Knowledge in the science of nursing is determined to be of quality based largely on the application for synthesis into understanding and supporting the human experience (Streubert & Carpenter, 2011). The philosophy of hermeneutics, in conjunction with the methodology of interpretive phenomenology, allowed for a holistic lens through which the lived world of the ICU nurse caring for patients with COVID-19 may be seen, heard, and understood (Peoples, 2021; Streubert & Carpenter, 2011). The design of this study thereby anticipated concepts and themes in data collection would be best understood through the lens of hermeneutics through interpretive phenomenology at this unique time in the field of nursing (Peoples, 2021; Polit & Beck, 2004).

Research Design

The philosophy behind the design of this study was hermeneutics. Hermeneutics has been associated with the ancient mythological god, Hermes, who brought messages and enlightenment to humanity (Palmer, 1969). As such, hermeneutics has been understood to entail bringing an elusive truth or message out of obscurity and into the realm of human intelligence and understanding (Palmer, 1969). Hermeneutics was further defined by Benner (1994) as the science of interpretation in nursing. Application of hermeneutics contributed to the current body of knowledge (the science of nursing) and

further reflected on what it means to be an intensive care nurse caring for patients with COVID-19 during the pandemic (Benner, 1994; Gray et al., 2017; Peoples, 2021).

Interpretive Phenomenology

Interpretive phenomenology was the methodology for this study. Interpretive phenomenology has been used in nursing to expand practical nursing in order to evoke and develop an exploration into what "good nursing" is and how to foster it (Benner, 1994; Streubert & Carpenter, 2011). Interpretive phenomenology was chosen to best represent the life-world of the intensive care unit nurse while caring for patients with COVID-19 (Munhall, 2012). The focus of interpretive phenomenology in regards to human science was to describe and interpret the meanings of lived experiences to a degree of both richness and depth (Van Manen, 2016).

The Hermeneutic Circle. Hermeneutics was applied through interpretive phenomenology using the hermeneutic circle. The circle was a schematic describing the cyclical nature of comprehension, learning, and growth (Benner, 1994; Jasper, 2004; Packer & Addison, 1989; Peoples, 2021; Streubert & Carpenter, 2011). Heidegger (1971) developed this circle with the idea that individuals approached learning with preconceptions (fore-conception), and as new information was synthesized, an understanding was achieved through continual revision (Peoples, 2021). Events in themselves do not result in understanding or growth unless there was a recognition of the significance or meaning that event has to an individual (Benner, 1994; Jasper, 2004; Streubert & Carpenter, 2011). Likewise, misunderstanding could occur when an individual ignored new information or did not recognize its significance. Some barriers to learning and comprehension would be a lack of interest, failure to recognize new

33

information, and information overload (Benner, 1994; Packer & Addison, 1989). See

Figure 3 for the components of the hermeneutic circle. As reflected in Figure 3, the

hermeneutic circle began by considering a whole experience, which was then

contextually illuminated, separated into parts of the experience for exploration, and then

reintegrated into understanding to reflect a new understanding of the whole experience

(Benner, 1994; Jasper, 2004; Packer & Addison, 1989; Peoples, 2021; Streubert &

Carpenter, 2011).
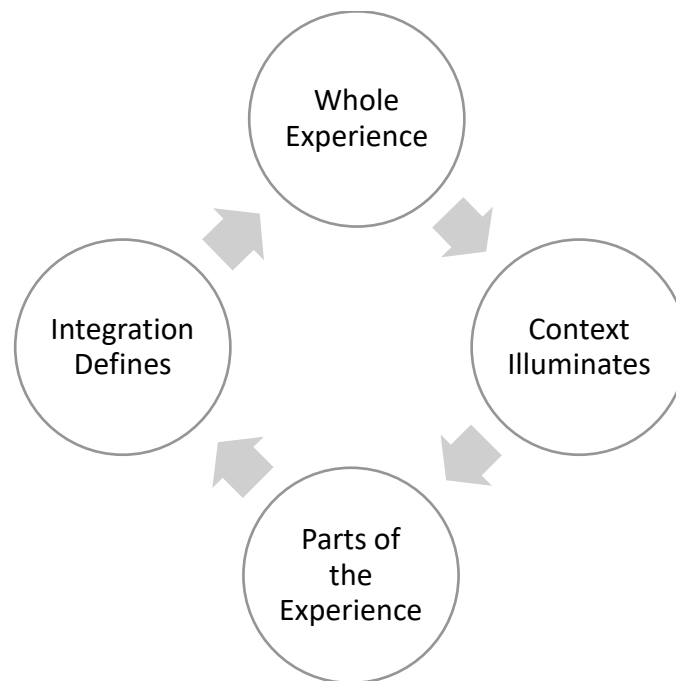
Figure 3. The Hermeneutic Circle.

(Benner, 1994).

Limitations of Hermeneutics. One critique of hermeneutics as an underlying

research philosophy was that it arose from sacred and religious texts and according to

critics can therefore have no scientific background (Bontekoe, 1996; Palmer, 1969).

However, the historical test of time suggests this method has successfully revealed the

meaning to hundreds of individuals, organizations, and communities in order to foster

learning and growth (Benner, 1994). Packer and Addison (1989) asserted that those who

critique this method often fail to recognize that interpretation of clinical information is in

fact central to medical practice. Additionally, all research allows for development and

growth through application in nursing (Benner, 1994). Finally, the nature of this approach

assumes a constant influx of new information compatible with the field of nursing

(Benner, 1994; Packer & Addison, 1989). No ultimate goal of completion is identified

because the information is constantly entering, modifying, and adapting to new scenarios

(Benner, 1994; Bontekoe, 1996). The hermeneutic philosophy was therefore compatible

with the nursing actions of continuous assessment and evaluation in the delivery of

patient care (Benner, 1994).

Less Effective Approaches

Although other methods of evaluation, such as descriptive phenomenology or a

quantitative survey design, may have reflected the day-to-day experiences of the

intensive care nurse caring for patients with COVID-19, the interpretation of what it is to

be such a nurse would not have been readily apparent. A simple description of a series of

events appeared to abandon the mental, emotional, and spiritual effects of circumstances

and responses which often spoke to the "why" in both nursing rationales and explanations

of human behavior (Benner, 1994; Bontekoe, 1996). Descriptions of outward processes

and observations along fail to illustrate the internal processes affecting nurse well-being,

professional quality of life, internal sources of motivation, and the development of

traumatic responses, compassion fatigue, and burnout (Benner, 1994; Bontekoe, 1996;

Jasper, 2004; Packer & Addison, 1989). However, the method of simple survey or

description of these experiences was insufficient if data were to contribute in a

meaningful way to the understanding of what it is to be an intensive care nurse caring for patients with COVID-19 during the pandemic (Benner, 1994).

Therefore, this study aimed to review the lived experiences of ICU nurses caring for patients with COVID-19 using an interpretive phenomenological methodology based on hermeneutic philosophy (Gray et al., 2017; Peoples, 2021). The application of Heidegger's (1971) hermeneutic circle was the most appropriate application of this philosophy for answering the established research questions. Further, the hermeneutic approach allowed ongoing, circular exploration between the whole and the parts of nurses' identified experiences to most accurately reflect interpretations based on new knowledge and synthesis in real-time (Munhall, 2012; Peoples, 2021; Streubert & Carpenter, 2011).

Role of the Researcher

The researcher's role was to recruit participants, establish a good working relationship, safeguard their information, ensure participants had a positive environment in which to interview, perform and record interviews, lead data analysis, present research findings, and disseminate information (Gray et al., 2017). According to Benner (1994), the primary role of the researcher was to look for the living world of the target population, dividing the biological responses from the mental and emotional motivations behind behaviors, actions, and words. Thus, the goal of Heideggerian hermeneutics, and this researcher, was to ascertain an interpretation of what it means to be an ICU nurse caring for COVID patients during a pandemic (Benner, 1994).

During data collection and analysis, it was critical that the researcher recognized their own experiences and potential biases so as not to influence the responses to the

research questions within the interview (Bontekoe, 1996). Heidegger (1927), the main contributor to hermeneutics, argued that detachment in itself is a perspective and warned against bracketing due to the potential to distort experiences through attempts to detach from common experiences. Maintaining such a balance is of particular importance to the trustworthiness of this study due to this researcher's identified professional experience as an ICU nurse caring for COVID-19 patients (Benner, 1994; Creswell & Creswell, 2018; Peoples, 2021). In addition, trustworthiness can be accomplished through journaling and audits of data analysis (Creswell & Creswell, 2018; Peoples, 2021) which will ensure the validity of interpretation without losing veracity through detachment distortion (Creswell & Creswell, 2018; Packer & Addison, 1989; Peoples, 2021). Ultimately, the role of this researcher was to show possible meanings that arise out of an exploration of data and reveal new possibilities for understanding (Benner, 1994; Bontekoe, 1996; Peoples, 2021).

<div align="center">Research Questions and Interview Prompts</div>

The two research questions were identified for this study are as follows:

1. What is the lived experience and meaning of being an ICU nurse caring for patients with COVID-19?

2. What effect has caring for these patients had on ICU nurses' relationships with the self, their loved ones, their colleagues, and their patients?

These questions guided the participant's interview process (Gray et al., 2017). To provide the opportunity for in-depth interviews, the research questions were broken down into the following sub-questions for the semi-structured interviews (Gray et al., 2017):

- Describe your experience caring for patients with COVID-19 in the ICU.

- What effects have you seen in yourself?

- What effects have you seen in your relationships with loved ones?

- What effects have you seen in your relationship with your colleagues?

- What effects have you seen in your relationships with your patients?

- What does it mean to you to be an ICU nurse caring for patients with COVID-19?

Each question was flexibly explored with the interviewer providing prompts where necessary such as "Tell me more about," and "Explain what you mean by…." to produce a thorough picture of the intent of the participant and reach full data saturation (Gray et al., 2017; Peoples, 2021). Member checking during the interview process promoted clarity of understanding and intent of the participant (Creswell & Creswell, 2018; Creswell & Poth, 2018). Semi-structured questions were worded to ensure open-ended exploration. Prompting was used to preserve the participant's emic view of each experience and perspective (Gray et al., 2017; Peoples, 2021). Emic views were important to qualitative research because they presented an understanding of reality that was not readily accessible to anyone besides that participant (Beals et al., 2019; Gray et al., 2017). In other words, prompting facilitated a glimpse of an insider's view on the world and key experiences (Beals et al., 2019; Gray et al., 2017; Peoples, 2021).

<center>Setting and Sample</center>

As discussed in Chapter II, COVID-19 became a worldwide infectious disease concern in December 2019 (Cucinnoti & Vanella, 2020). The International Council of Nurses (ICN, 2021a) explained that nurses on the frontlines have been heavily involved in educating, leading, researching, treating, and caring for patients with COVID-19.

Nurses were expected to participate in caring for patients suffering from a disease with unknown variables regarding the virility, pathophysiology, and nature of the virus. Widespread public failures and fears regarding personal protective equipment and resources left nurses caring for patients in scenarios of high risk and low security (ICN, 2021a). Such challenges held heavy physical, social, and psychological impacts for ICU nurses, who typically spend more time with critically ill patients than any other healthcare provider in the hospital setting (Bergman et al., 2021; Gordon et al., 2021; Latvala et al., 2021; Lissoni et al., 2020; Moradi et al., 2021; Sharma & Jiwan, 2015; Villar et al., 2020).

Context for the Study

In the United States alone, 93% of FLWs reported elevated stress and 76% reported both exhaustion and burnout during the pandemic (ICN, 2021b). In July of 2020, about half of America's nurses reported feeling anxious, unable to relax, overwhelmed, and irritable (American Nurses Association [ANA], 2021; ICN, 2021b). By January 2021, at least 2,800 nurses had sacrificed their lives and 1.6 million healthcare workers had been infected in over 60 countries (ICN, 2021a). Although thought to represent a gross underreporting, this number alone exceeds the number of nursing deaths in World War I (ICN, 2021a). The ICN (2021b) warned that emerging data implied that significant global effects of mass trauma relating to the care of patients with COVID-19 in the nursing population are still yet to be fully felt. By 2030, the ICN (2021b) predicted a global shortage of approximately 14 million nurses without fully understanding any extra attrition induced by chronic care of COVID-positive patients. See Figure 4 for an illustration of risks faced by nurses caring for patients with COVID-19 (ICN, 2021a).
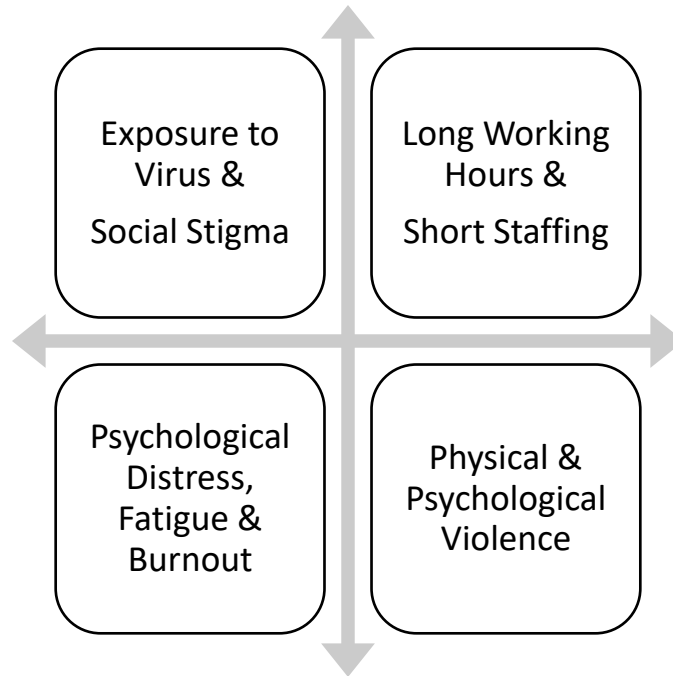
Figure 4. Risks Faced by Nurses Caring for Patients with COVID-19.

(ICN, 2021a).

Intensive care unit nurses have spent the pandemic learning from these

experiences and these lessons have the potential to benefit both the healthcare systems

and communities throughout the world (ICN, 2021a). To respect the sacrifices made by

FLWs and preserve future health care it was necessary to better understand and apply

best practices to both protect and retain nurses (ICN, 2021b). The COVID-19 pandemic

has also highlighted some key weaknesses and vulnerabilities in the healthcare system

which have affected almost every aspect of public health (ICN, 2021a, 2021b). A global

health crisis brought about by COVID-19 held potential for nurses to garner innovative

strategies for improving the effectiveness of nursing care and the development of new

healthcare policies (ICN, 2021a, 2021b).

Inclusion and Exclusion Sampling Criteria. Participants were selected based on qualifications of both inclusion and exclusion criteria. Inclusion criteria consisted of the following:

1   A valid nursing license.

2   Caring for patients with COVID-19 on a unit of hire or contract.

3   A minimum of an Associate degree in Nursing.

Exclusion criteria included the following:

1   An invalid nursing license for any period of time between December 2019 and the time of the interview.

2   ICU nurses who did not participate in the care of patients with COVID-19 between December 2019 and the time of the interview.

3   Nurses who cared for patients with COVID-19 due to being pulled or floated to another unit.

4   Nurses who did not graduate from nursing school with at least an Associate degree by December 2019.

5   Nurses with an advanced practice degree on or before December 2019.

Justification for Sampling Criteria. A valid nursing license must have been held between December 2019 and the time of the participant interview to ensure the participant was legally able to care for these patients throughout the duration of the experience review. Participation in providing physical nursing care for patients with COVID-19 from December 2019 to the time of the interview was selected in order to reflect the longevity of participant meanings developed over time. Direct patient care provisions also provided a more comprehensive picture of how caring for these patients

developed into meaningful experiences, and whether those experiences had long-lasting impacts on nursing relationships and care. Care for COVID-19 patients must have taken place on the participant's unit of original hire/contract in order to eliminate outliers in participant data relating to being pulled or floated to an unfamiliar setting that could have affected the lived experience. The criteria of having graduated with at least an Associate degree or greater before December 2019 was chosen to exclude the experiences of student nurses to emphasize the lived experience of nurses who had the opportunity to care for patients in a critical care setting before the pandemic. Exclusion of advanced practice nurses was chosen to preserve the perspective of the bedside ICU nurse without other potentially influencing factors.

<div align="center">Participant Recruitment</div>

Participants were recruited for this study using professional organizations targeted at ICU nurses (such as the American Association of Critical Care Nurses or AACN) and snowball sampling through referrals. Qualtrics was the software used to elicit scheduling and basic demographic information before the interview. Zoom was the software used to interview participants.

1. This study was submitted to the Institutional Review Board (IRB) of The University of Southern Mississippi for approval before initiating recruitment attempts.

2. Participants were recruited through social media using professional organizations dedicated to critical care nurses as well as snowballing techniques. An advertisement with a Qualtrics link and email dedicated solely to the recruitment of this study was included.

3. Informed consent was obtained using an online interview scheduling link in Qualtrics, where participants were informed of the potential benefits and risks of participation in this study.

4. Upon opening the Qualtrics link or emailing the listed account, participants were invited to complete a short demographic survey for information on age range, gender, marital status, children, years of experience in critical care/nursing, primary shift (day or night), geographic region(s) where experience occurred, and highest education obtained.

5. The researcher sent out a professional introduction and reminder of the interview appointment the day before the scheduled interview. Included was a written overview of the questions to be discussed in order to give participants time to prepare for the interview.

6. The researcher conducted the interview virtually via Zoom.

At the end of each recorded Zoom interview, the participant was asked for permission to be contacted again for potential member checking during data analysis. Member checking was used to support the Heideggerian concept of co-creating data between participants and researcher (Gray et al., 2017). Co-creating through member checking refers back to the *fusion of horizons* described by Heidegger (1971).

Measures for Ethical Protection

Before initiating recruitment, this study was approved by the Institutional Review Board of The University of Southern Mississippi. To protect anonymity of participants, no names of individuals, organizations, cities, or towns were used in the data analysis or

final report of this study. Names of states may have been used if the information can be reasonably included (Gray et al., 2017).

Selecting Participants

Participant interviews were collected to the point that data saturation was achieved (Peoples, 2021). Anticipated data saturation point included anywhere from eight to fifteen participants. Approximate participant estimates for data saturation were to ensure data collection provides material for a sufficiently rich, in-depth narrative (Gray et al., 2017; Lieblich et al., 1998; Peoples, 2021).

Instrumentation and Materials

Collected data consisted of participant interviews and demographic data spanning the time frame between December 2019 and February 2022 (Gray et al., 2017; Peoples, 2021; Streubert & Carpenter, 2011). Participants had the option to submit supporting data such as a picture, journal entry, or poem if they chose. Triangulation of data was accomplished through data collected in participant interviews, observations by the researcher, and current evidence drawn from this literature review.

Data triangulation allowed for multiple perspectives, maximizing interpretation accuracy (Creswell & Creswell, 2018; Gray et al., 2017; Munhall, 2012; Peoples, 2021). Triangulation of the study design allowed for providing additional richness, detail, and depth to the explication of the lived experience of the ICU nurse caring for patients with COVID-19 (Creswell & Creswell, 2018; Gray et al., 2017; Peoples, 2021). Data triangulation also helped ensure the trustworthiness of the research through multiple sources of data collection (Gray et al., 2017; Munhall, 2012; Peoples, 2021).

Semi-Structured Interviews and Observations

Semi-structured interviews allowed participants to share what they experienced in their own words and with their own priorities for communication (Gray et al., 2017). Semi-structured formatting allowed participants to select what information, thoughts, feelings, and sensations are relevant to the meaning of the experience. Conversation thereby became the medium through which data was shared and clarifying open-ended query assisted the participant in probing recall and interpretation actively through the hermeneutic circle (Gray et al., 2017). Due to social distancing, infection control guidelines, and valuable information that may be gained from observation of nonverbal cues, participant interviews were conducted electronically and recorded (Gray et al., 2017). Observations were recorded as memos after the interview by the researcher. Memos allowed recording of firsthand experiences with the participant. Memos were also useful to later explore topics that were uncomfortable for the participant to extensively discuss (Creswell & Creswell, 2018).

Data Analysis and Explication

Overall, explication of data emerged from the interpretive analysis of interpretive phenomenology as specified by Benner (1994). Heidegger's (1971) hermeneutic circle was engaged within this analysis to a) foster identification of the whole (transcripts/data), b) revise fore-conception (preconceptions) for better understanding of parts (codes/themes), and c) synthesize into a greater understanding of the whole (Peoples, 2021). Data analyses was a spiral process, in which a new understanding of the whole facilitates a return to an enhanced understanding of individual parts (Peoples, 2021). Benner's (1994) analysis consists of three parts in which thematic analysis, analysis of

exemplars, and the search for a paradigm are completed. Explication of data steps are

discussed in the next section.

Explication of Data Steps

Benner's (1994) method was applied to participant interviews as follows:

1. Thematic Analysis

   a. Each transcript was read several times to develop a global analysis via

      data immersion (Gray et al., 2017). After several transcripts, emerging

      codes were used in content analysis to identify themes and patterns of

      interpretive inquiry (Benner, 1994; Gray et al., 2017).

   b. Lines of inquiry were used to identify an interpretive plan where there

      was an emerging pattern or theme of repeating codes. Each transcript was

      reviewed again from the lens of the interpretive plan. Emerging data from

      this microanalysis was integrated into the interpretive plan (Benner,

      1994).

   c. General categories were formed based on data findings (Benner, 1994).

2. Analysis of Specific Incidents

   a. Similar situations were grouped to review aspects of the environment and

      participant responses (Benner, 1994). Patterns were then identified (Gray

      et al., 2017).

   b. Exemplars, or stories, were identified which seem to represent strong

      intention or meaning in a form of narrative analysis

      (Benner, 1994; Gray et al., 2017; Lieblich et al., 1998).

3. Paradigm Search

    a. Transcripts were reviewed to identify strong instances of meaningful

        patterns characterized by rich descriptions which illustrate action and

        understanding emerging within a situational context (Benner, 1994).

Demographics were subjected to data analysis. This was done using descriptive

statistics. Results were presented visually alongside identified themes and patterns in the

discussion of research findings (Creswell & Creswell, 2018; Gray et al., 2017).

Heidegger believed language expressed knowledge beyond human intention

through interpretation (Jasper, 2004; Munhall, 2012). However, human beings are both

cultural and linguistic; therefore, a crucial aspect of analyses was to pay attention to clues

of meaning (Benner, 1994; Bontekoe, 1996; Parker, 1969). Understanding and

interpretation of messages and text was not merely a concern of science but also crucial

to understanding human experience (Packer & Addison, 1989; Parker, 1969; Van Manen,

2016). Language meanings depended on context; the writer of the text revealed their

unique lifeworld in pieces (Benner, 1994; Peoples, 2021). Linguistic and cultural

influences only made sense against a background of significance (Benner, 1994; Coffey

& Atkinson, 1996; Peoples, 2021; Van Manen, 2016).

Validity and Reliability

Ensuring qualitative rigor was necessary in order to produce trustworthy results

(Creswell & Creswell, 2018; Gray et al., 2017). Qualitative rigor was preserved in this

study through the use of primary resources to confirm the relationship between

interpretative phenomenology and the framework of hermeneutics (Benner et al., 1994).

The use of Benner's (1994) model for data analysis (specifically for the field of nursing) aided to facilitate qualitative rigor in the interpretation and discussion of findings.

Credibility and Transferability. Credibility of this study was preserved through triangulation of data, peer review of data analysis, explanation of researcher bias, member checking, rich descriptions of context, and external audits (Creswell & Creswell, 2018; Gray et al., 2017; Peoples, 2021). Transferability was supported via the insights of this study in similar settings as long as context, participants, and experiences are vetted before the generalization of this study's findings (Peoples, 2021). Additionally, themes and summary of this study concerning ICU nurses caring for patients with COVID-19 offered valuable insights for healthcare administrators, healthcare policymakers, nurse educators, and bedside nurses (ICN, 2021a, 2021b).

*Consistency and Dependability***.** Consistency was supported through the use of an audit trail to enhance the rigor of this study (Creswell & Creswell, 2018; Gray et al., 2017; Peoples, 2021). Dependability was supported through detailed planning and follow-through on the methods of obtaining and explicating data for the purposes of this study (Creswell & Creswell, 2018; Peoples, 2021). Repeating the steps listed in this chapter within a comparable context using a like-minded population should yield similar results (Creswell & Creswell, 2018; Gray et al., 2017; Peoples, 2021).

Coding Procedure for Reducing Information

To organize the qualitative data, it was necessary to demonstrate a clear coding process to reduce the information (Coffey & Atkinson, 1996; Creswell & Creswell, 2018; Peoples, 2021). Reduction and coding processes reflected the hermeneutic circle while alternating between the whole of the data and the parts within the details for

interpretation (Coffey & Atkinson, 1996; Peoples, 2021). Reduction and coding began by considering a whole experience, which was then contextually illuminated, separated into parts of the experience for exploration, and reintegrated into understanding to reflect a new understanding of the whole experience (Benner, 1994; Jasper, 2004; Packer & Addison, 1989; Peoples, 2021; Streubert & Carpenter, 2011).

Coding procedure for reducing information was accomplished by following the steps represented in Figure 5, which represented the application of the hermeneutic circle in a stepwise process.
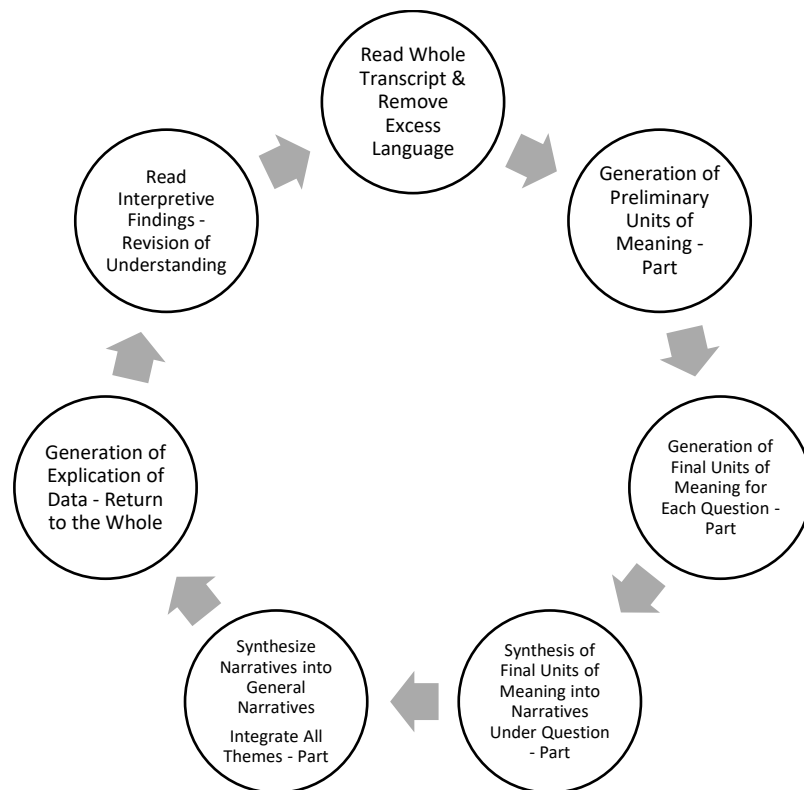
Figure 5. Coding Process for Reduction and Explication of Data.

(Peoples, 2021).

49

Summary

The lived experience of the ICU nurse caring for patients with COVID-19 was explored. Interpretive phenomenology guided by the philosophy of hermeneutics directed the collection and explication of data (Creswell & Creswell, 2018; Peoples, 2021). The role of the researcher has been discussed to ensure several techniques were utilized to preserve the trustworthiness, validity, and reliability of the data (Benner, 1994; Coffey & Atkinson, 1996; Creswell & Creswell, 2018; Creswell & Poth, 2018; Gray et al., 2017; Lieblich et al., 1998; Peoples, 2021). The analysis of this data could influence the understanding of healthcare administrators, healthcare policymakers, nursing educators, and the nursing profession (ANA, 2021; Benner, 1994; Creswell & Creswell, 2018; Creswell & Poth, 2018; Gray et al., 2017; ICN, 2021a; ICN, 2021b; Streubert & Carpenter, 2011; Van Manen, 2016). In Chapter IV, the results of the data collection are discussed.

CHAPTER IV – RESULTS

Introduction

In this chapter, the process of generating, gathering, recording, and analyzing data is reviewed. Data analysis steps are reiterated for the dependability of the study using the hermeneutic circle and Benner's (1994) method of interpretive data analysis for the nursing profession. Findings of this study are presented by theme and subtheme according to research questions. Evidence of quality is reviewed and processes for safeguarding the trustworthiness of data are discussed.

Process of Generating, Gathering, and Recording Data

The process of generating, gathering, and recording this data followed the outline presented in Chapter III. Data collection steps were followed to increase the dependability of future attempts to replicate this study's findings. Data collection was approved by USM's IRB, Protocol 21-205. The approval letter may be found in Appendix A. Participants were recruited using the American Association for Critical Care Nurses website and accessed the Qualtrics link to the *Participate in Nursing Research* web page. An example of the advertisement on the *Participate in Nursing Research* web page can be found in Appendix B. A recruitment flyer was distributed to participants upon request for those who wished to refer a friend or colleague for this study. The flyer used may be found in Appendix C.

Participants began by clicking a link (online advertising) or scanning a QR code (via the flyer) which took them to the Qualtrics page for the study. An online consent form was then available to the participants to continue submitting their information for

use in this study. An example of online consent may be found in Appendix D. Participants who met inclusion criteria answered a brief set of demographic questions.

Demographics

Thirty-seven prospective participants responded to the Qualtrics survey, and (n = 20) met inclusion criteria for a recorded Zoom interview. Each of these participants received a thank-you email along with the participant letter, and a reminder email with the interview questions and zoom link on the day before their interview. The participant letter may be found in Appendix E. Most of the study participants were female with various years of experience in the ICU. For an overview of participants' demographic information, please refer to Appendix F.

On the interview day, participants joined the researcher via Zoom, gave permission for the interview to be recorded, and discussed the main research questions. As interviews were semi-structured, additional probing for clarification and member checking was performed using phrases such as, "Can you tell me more about…" or "You mentioned _____, what does that mean to you?" Member checking was done to promote Heidegger's (1971) "fusion of horizons" by co-creating an interpretation of the experience.

Each interview was automatically transcribed using Zoom software, and immediately following the interview, the researcher replayed the audio and reviewed/corrected the transcript to accurately reflect the words, sentences, and cadence of the participant. At this time, observation notes were also added to reflect when participants demonstrated a strong emotional response or nonverbal cue such as crying.

Participant information in the transcript was also edited to remove identifying

information about the participant and their organizations. Additional member checks

were also performed with one-third of the participants via phone or email to ensure

accuracy of transcription and clarity of nurse intention for underlying meanings.

<center>System for Data and Emerging Understandings</center>

The researcher maintained a reflective journal to track new and emerging

understandings after each interview. Reflective journaling was also used to establish

areas of potential bias and guard against those biases translating into the interviewing

process. Identifying these understandings along the way was integral to the use of the

hermeneutic circle as represented below in Figure 6.
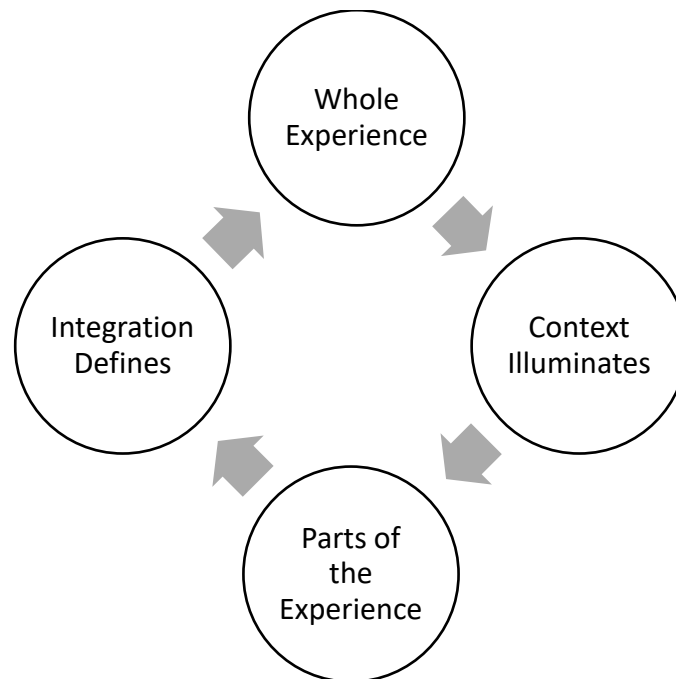
Figure 6. The Hermeneutic Circle.

(Benner, 1994).

Data was organized into a cataloging system using tables in Microsoft Word.

Narrative statements and meaningful quotes were listed according to the participant and

<center>53</center>

then coded into parts. Codes were then categorized into patterns and themes in order to establish lines of inquiry. Finally, meaningful patterns with rich descriptions were illustrated to represent an understanding regarding the whole of ICU nurses' experiences in their situational context. Reduction and coding of data is also represented in more detail below in Figure 7.
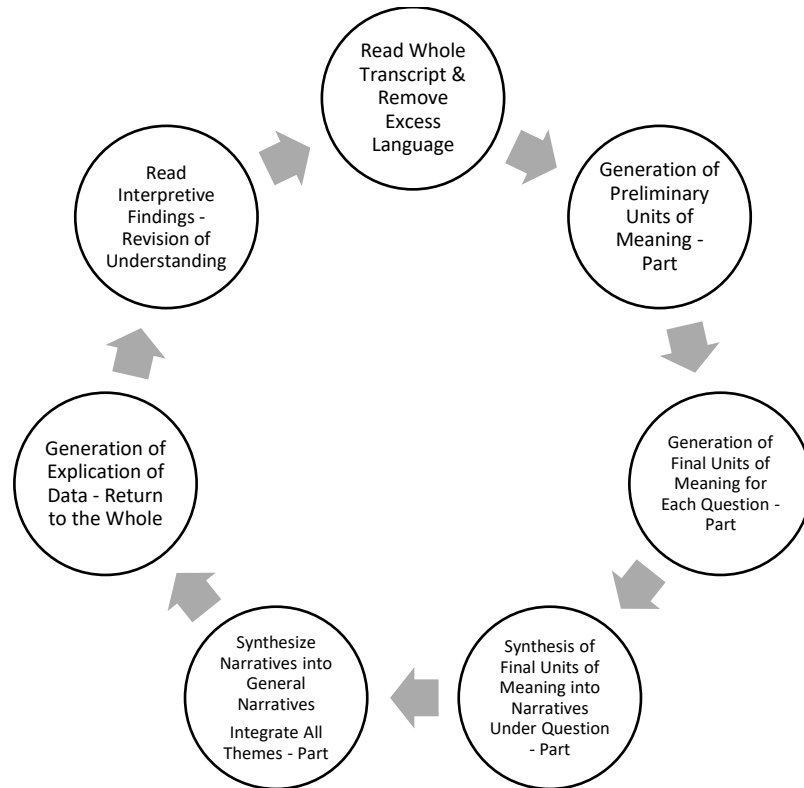
Figure 7. Coding Process for Reduction and Explication of Data.

(Peoples, 2021).

Benner's (1994) method of interpretive data analysis was applied to the data collected in participant interviews as follows:

1. Thematic Analysis

    a. Each transcript was read and listened to by the researcher several times for global analysis (Gray et al., 2017). Emerging codes were identified and

marked. These codes were then used to identify themes of interpretive inquiry for future interviews and analysis (Benner, 1994; Gray et al., 2017).

b. Lines of inquiry were used to identify an interpretive plan based on the emerging pattern of repeating codes. Each transcript was reviewed again from the lens of the interpretive plan. Emerging data from this microanalysis was then re-integrated into the interpretive plan and used to guide future interviews (Benner, 1994).

c. General categories were formed based on data findings (Benner, 1994).

2. Analysis of Specific Incidents

a. Similar situations were grouped together to review aspects of the environment and participant responses (Benner, 1994). Patterns were then identified (Gray et al., 2017).

b. Exemplars, or stories, were classified into categories that appeared to represent either a strong intention or meaning in the form of a narrative (Benner, 1994; Gray et al., 2017; Lieblich et al., 1998).

3. Paradigm Search

a. Transcripts were reviewed to identify strong instances of meaningful patterns characterized by rich descriptions. These descriptions illustrated an emerging understanding within a situational context (Benner, 1994).

The Findings

Interview data yielded results that reflected the participants' view in each of the research questions guiding this study:

- What is the lived experience and meaning of being an ICU nurse caring for
  patients with COVID-19?

- What effect has caring for these patients had on ICU nurses' relationships
  with the self, their loved ones, their colleagues, and their patients?

To provide the opportunity for in-depth interviews, these questions were divided into sub-categories, to address specific parts of the research question as seen below (Gray et al., 2017):

- Describe your experience caring for patients with COVID-19 in the ICU.

- What effects have you seen in yourself?

- What effects have you seen in your relationships with loved ones?

- What effects have you seen in your relationships with your colleagues?

- What effects have you seen in your relationships with your patients?

- What does it mean to you to be an ICU nurse caring for these patients?

Describe Your Experience Caring for Patients with COVID-19.

The first interview prompt question led to the identification of four themes which are: a) "That Wears on You," b) Professional Context, c) Personal Responses, and 4) "Nursing Was…" Identified themes and their respective subthemes are demonstrated in Table 1.

Table 1

Themes Emerging in "Describe Your Experience"

Themes	Sub-Theme	Sub-Theme
"That Wears on You"	-	-
Professional Context	Environmental Factors	Medical Mistrust
Personal Responses	-	-
"Nursing Was…"	-	-

"That Wears on You." Almost every participant discussed the sheer amount and frequency of death and poor patient outcomes as one of the key causative factors eliciting the effects of caring for patients with COVID-19. This theme, "That Wears on You," incorporates participants voicing feelings of a loss of control in influencing those outcomes and an overall perception of patients/coworkers suffering without being able to provide comfort, reassurance, or relief. The words "futile," "helpless," and "frustrating" are used.

One ICU nurse (#19) stated the following:

It didn't matter if you were an excellent nurse and it didn't matter if you were a crappy nurse. It didn't matter if you tried hard and it didn't matter if you didn't try at all…COVID was completely out of our hands. We would do the best we could…and people just died. If you got on a ventilator, you had an 80% chance of dying on the ventilator, and if you got put on dialysis it's a 100% chance of dying. I held the hands of many patients that died alone. I was the only person in the room with them to know. They didn't know me…they didn't know I was in there

57

because they were sedated and intubated and they died on the ventilator. I was

alone with a lot of people that died… and that wears on you. (Nurse #19)

Another nurse (#18) stated,

The problem is, is that whenever you put somebody with COVID pneumonia on

ECMO [extracorporeal membrane oxygenation] there's nowhere else to go. The

rest of their bodies work, but their lungs are hamburgers. So, what inevitably

occurred was a very long, slow prolonged COVID sepsis death, where people just

basically disintegrated in the bed. (Nurse #18)

Finally, another nurse (#20) stated,

…it's just kind of evolved into this and people are still dying. We still have days

where you walk in, along with the ICU, and you have every single crash cart

pulled out, and I've had people say to me literally, "Your unit looks like a war

zone." People screaming at each other and you have five codes going on…and

that's not an exaggeration. (Nurse #20)

Professional Context.

The theme "Professional Context" was divided into two subthemes: a)

environmental factors and b) medical mistrust. Subthemes were commonly used by each

nurse in the study. They served as descriptors for the setting and context of caring for

patients with COVID-19 in the ICU.

Environmental Factors. According to participants, environmental factors included

things like having no available hospital beds, operating at or beyond maximum hospital

capacity, increasing patient census to surging or overflow, short staffing, extended patient

length of hospital stays, differences in care based on the size of the hospital, insufficient

resources to care for patients, insufficient medical equipment to provide needed

treatment, insufficient amounts or types of personal protective equipment, and overall

poor patient outcomes. One nurse (#14) recounted,

> In the middle of a COVID patient surge, … we just don't have the resources
>
> available to give, like, basic care…. I had three patients back-to-back that each
>
> got intubated. I ended up with three ventilated patients in the PCU [progressive
>
> care unit] during a surge. Luckily, they had monitors, but that was the craziest
>
> shift. I…had one of the patients self-extubated while I was intubating a different
>
> patient. We re-intubated him, but I think it's just hard because…I don't think the
>
> doctor…had the look on his face like, "Why did this happen?" and I'm thinking,
>
> "What did you expect? I can't be in all these rooms at once!" (Nurse #14)

Medical Mistrust. The theme of "Medical Mistrust" was attributed to participants

in response to the political involvement in medical treatment protocols, media

misinformation, and rejection of medical providers by the community. Participants also

attributed a higher prevalence of verbal abuse, violence, and threats against medical

providers with this aspect of caring for patients with COVID-19. One nurse stated,

> We have nurses right now that are getting caustic verbal abuse from our
>
> community. When they're just out shopping, community members will come up to
>
> them and say, "When are you going to go kill some more people?" And so, at
>
> first, we were heroes, and now we're all devils (Nurse #2).

Another nurse (#3) stated, "I feel like they hate us. We're the bad guys and now we're

being accused of things like, 'What did you do to make them sicker? Why can't you save

them?'" Lastly, one nurse stated,

In the beginning, they were grateful for us. In the beginning, we were working together and fighting together. We were losing people, but it was like okay we can do this…and then it evolved, and there became a political spectrum. It became political and it got harder. People are still dying, but now their families are mean, they're violent. In our ER now they have the police stationed there every day because they've had so many people be violent over wearing masks, over visitor restrictions…. People don't appreciate what we're doing…what we're fighting for (Nurse #20).

Personal Responses. The theme "Personal Responses" contained the thoughts, feelings, and behaviors of all or most nurses experienced since the beginning of the pandemic. They are organized below in order from most often to least often noted during the nurse's descriptions:

- Frustration

- Fear

- "Anxiety of the Unknown"

- Grief

- Exhaustion

- Withdrawing/Limiting Connections

- Seeking Spiritual Support/Praying

- Shock

- PTSD

- Life-Altering

- Dreading Work

- Hope for the "end of COVID."

For example, one of the nurses stated the following:

> In the beginning of COVID, it was scary because we didn't know what we were
> up against. And then it was scary because my co-workers died. When you have to
> intubate a very dear friend…it's difficult. COVID has damaged nurses in ways
> that nothing can ever describe (Nurse #20).

"Nursing Was…" Participants often reflected throughout the interview process on ways in which their own nursing practice and attitudes were compelled to change because of caring for patients with COVID-19. One nurse (#3) stated, "We were used to running in [to patient's rooms] and saving people's lives." Another nurse (#11) said, "We care for a lot of people that are at their worst moment, we see a lot of death. That's just how it is, but there was a balance of good and bad outcomes. With this, it was overwhelmingly bad outcomes." A third nurse (#13) reflected, "I feel like that was really hard because I feel like it really changed what nursing has always been."

What Effects Have You Seen in Yourself?

The interview prompt, "What Effects Have You Seen in Yourself While Caring for Patients with COVID-19?" led to four emerging themes regarding the nurses' views of how caring for patients with COVID-19 affected the self. These themes are: a) recognize, b) respond, c) purpose, and d) plan. These themes are demonstrated in Table 2 below.

Table 2

Themes of Effects in the Self and Their Application

Themes	Action of Theme
Recognize	Nurses recognize the effects/ symptoms of caring for patients with COVID-19 in themselves.
Respond	Nurses respond with current coping tools.
Purpose	Nurses evaluate and redefine their core purpose of nursing and how it fits into their experience.
Plan	Nurses make a plan for approaching their role as a nurse in the future based on their newly identified core purpose of nursing.

Recognize. Every nurse discussed recognizing the effects of caring for patients with COVID-19 at some point since December 2019. One nurse recounted,

I had a complete, like, meltdown. I was like, "I don't want to do this anymore." Which doesn't fit, you know, because nursing always fulfilled me. I felt like I made a difference and I served a purpose. It's my calling…but when you get to a point where everybody just keeps dying in the ICU with COVID, you're like, "What am I really doing? What difference am I making any longer?" I was very close to just walking totally away from my whole nursing career. I was like, 'I've been doing this so long, and I'm completely drained. I don't have anything else to give…the chaplain was up on the floor and she just looked at me and she knew. She said, "You need some time off. You need to rejuvenate; you are still making a difference." She gave me the pamphlet on compassion fatigue, stress, and anxiety.

I read it and I thought, "I have ALL of these things." I have never been so ready to leave nursing (Nurse #3).

Another nurse (#4) reflected, "For the first time in my nursing career I've seriously thought about not wanting to be a nurse anymore. I have never cried so much at work as I have in the last six months." Nurse (#9) also stated, "I think I became hard. I used to be sweet and bubbly all the time and I loved being a nurse…. I would even have done it for free because that's how much I loved it…but then COVID came and…I would just dread it on my way to work."

Yet another nurse (#11) described,

I'm going to break. I haven't seen my friends in like a year. Part of it is intentional. I didn't think there was going to be long-term damage, but then my husband would tell me, "You never leave the house. You're not even listening to music anymore. You're kind of always down" (Nurse #11).

Respond. Participants were most likely to respond to the effects of caring for patients with COVID-19 by either speaking to a therapist or actively compartmentalizing. One nurse (#4) said, "I've reached out to our employee assistance counseling, but I did not feel like it was very helpful. I almost needed someone to acknowledge the trauma that we're going through."

The next most often used coping tools included medication and exercise. One nurse (#6) stated, "I started working out more which I feel is good. That's like my out, usually, but it just doesn't take the burden 100% off." Several participants reported their healthcare providers either starting a new prescription or increasing their baseline medication management doses for anxiety or depression.

The third most often used coping tool involved either an intentional change of focus or actively numbing feelings. Other techniques included a change of focus to things nurses believed that they could control as well as actively numbing. One nurse (#7) explained, "I just make sure that I know like my focus is my family and the things that I enjoy doing…. I love my work, but it's also it's not my whole life." Several participants reported an excessive increase in their alcohol consumption.

The fourth most commonly used coping tool involved the therapeutic use of the arts, music, and nature. Examples included listening to music, spending time in nature, and engaging in creative expression. Listening to music was reported by several participants as a method of disconnecting or transitioning from work to home. Other participants mentioned using nature therapy (hiking, walking, being outdoors).

Finally, participants reported that discovering new ways to express creativity in the workplace was helpful. Nurses reported seeing benefits to their mental health and nursing practice using these tools. One nurse (#2) stated, "I don't blame anybody for any coping skill they could find through this thing. We will all just put the pieces together later."

Purpose. Evaluation of their old nursing purposes was a key step in description of this process for participants. Core purposes before COVID-19 were described by participants to include:

- "Save lives" (#3)
- "Fix people" (#16)
- "Make a difference" (#1, #2, #11, #15, #19, #20)

Core purposes that were defined by participants after experiencing this process when caring for patients with COVID-19 that helped them return to work included:

- "To be able to go back to work the next day" (#2)

- To "get through" the shift (#2)

- To be "hands of comfort" (#3)

- "Focus on family; work is not my whole life" (#7)

- "Training everyone" (#9)

- "To be mentally and emotionally well" (#11)

- "To be a better nurse and help others do so as well" (#13)

- "To protect myself and others" (#15)

- "To learn about outcomes and new treatments" (#16)

- To value myself as "an ICU nurse" (#19)

- "To protect myself mentally and emotionally" (#20)

Plan. After identifying a new core purpose, participants looked to the future to make a plan on how they would stay in the nursing profession. Most frequently, nurses planned to decrease (or limit) their exposure to caring for patients with COVID-19 in the ICU. Majority of nurses (70%) in this study reported either changing their primary job role or decreasing their hours in the ICU. Many nurses believed that changing their focus to their own health and attitude was a contributing factor in deciding to spend less time caring for patients with COVID-19. One nurse (#8) stated, "I remember thinking that I can't quit in the middle of a pandemic when they need us right now…but I just had to make a change." Another nurse explained,

This job offer opportunity opened up and I said, "done," [pause] but then there

was guilt with leaving because everybody was like, "How could you leave us in

the middle of a pandemic?" And I told them, "I just can't do this anymore" (Nurse

#11).

Correspondingly, a nurse (#20) stated, "It was either I needed to leave nursing altogether

or I make a dramatic change. And that is happening in droves right now."

The second most reported plan was to find a way to better cope with the effects of

caring for patients with COVID-19. Nurses did not alter their location, role, or committed

hours. Instead, nurses reported planning new ways to disconnect from work when at

home, entering "cruise mode" (Nurse #19) during their patient care, improving their

coping tools, using more active expression of feelings in the future (Nurse #16), or

suppressing feelings to "get through" (Nurse #2).

What Effects Have You Seen in Your Relationships with Loved Ones?

The interview prompt, "What Effects Have You Seen in Your Relationships with

Loved Ones While Caring for Patients with COVID-19?" led to an emerging

understanding of six themes: a) isolation of the ICU nurse from family and friends; b)

loved ones "don't get it"; c) having "zero left to give"; d) "my family is suffering because

of me"; e) coping with family roles and responsibilities, and f) meaningful support. Each

of these themes is demonstrated in Table 3 and further examined in more detail below.

Table 3

Themes of Effects on Relationships with Loved Ones

Isolation From Family and Friends
"They Don't Get It"
"Zero Left To Give"
"My Family is Suffering Because of Me"
Coping With Family Roles and Responsibilities
Meaningful Support

Isolation of the ICU Nurse from Family and Friends. The most frequently reported effect of caring for patients with COVID-19 in the realm of relationships with nurses' loved ones was the isolation of the nurse from family and friends. For example, one nurse stated,

> I just had that classic PTSD response where I felt totally disconnected from everything, all my relationships…. That's something that I don't think people realize. That as nurses you can just disconnect from all your life and connections because of work (Nurse #1).

Comparably, nurse #2 also stated, "That sense of depersonalization with your loved ones and completely snapping…that really happened to me." Another nurse (#5) reflected on the effects felt in her neighborhood:

> Neighbors got to the point that, when they learned what I did for work they stopped allowing us in their homes. I have two rambunctious little boys and I couldn't tell them to go outside and find somebody to play with. I was the leper on the street because I worked with the plague patients (Nurse #5).

67

Another nurse (#13) stated, "I have a stepson and it was interesting having that dynamic. His mom was nervous about him being around me because, of course, I was going to be the person that gave it to him." Finally, one nurse (#15) recounted, "That was the hardest part, … feeling like you were lonely. You were an outcast even in your own family."

   "They Don't Get It." Nurses often reported one of the biggest/hardest challenges of caring for patients with COVID-19 was that their friends/spouse/kids/parents "don't get it." One nurse explained, "My husband just doesn't understand what I'm doing." Another nurse (#8) stated, "Talking even with friends that don't work in healthcare, but they just didn't understand. Still don't understand." In parallel, one nurse elaborated,

>   I kind of lost contact with most of my friends. I had a boyfriend at the time. He
>
>   didn't get it. He wasn't seeing how many people are dying all the time…and so my
>
>   boyfriend and I broke up. After all that, it completely changed us. We were two
>
>   completely different people (Nurse #9).

Another nurse reflected on the difficulty of dealing with misinformed family members:

>   There are a few people who I've just cut out of my life because it's too hard
>
>   because of all the misinformation. I was butting heads with my dad for a while
>
>   because he was a big conspiracy theorist and I had to set a lot of boundaries with
>
>   what we could talk about because I couldn't separate from that entire relationship
>
>   (Nurse #14).

Additionally, one nurse stated,

>   My family members want to talk about COVID. They ask, "What do you see in
>
>   the hospital? We're worried about this new treatment." I think I'm just tired…I'm
>
>   tired of everything that has to do with COVID. When family members want to

talk about it then I'm like, "Bah humbug. I DON'T want to talk about it" (Nurse #19).

"Zero Left to Give." Nurses also reported feeling unable to engage in their relationships with their family and friends because of demands at work. One nurse stated,

I have a small child and when the pandemic started, I had moments of rage, with her, because…I could not regulate my emotions. I had zero left to give, and that's still there…zero left to give. I came home and I could barely even talk to her; I was so tired after taking care of really sick COVID patients the whole day (Nurse #2).

Another nurse explained,

I've had to make a conscious switch [to home], "Okay, you're home now your mom now. You need to be patient. You need to just love on your kids. You need to take in being home with your kids," and it's kind of sad that I have to constantly remind myself of that (Nurse #4).

A third nurse stated,

I've been short-tempered and not pleasant to live with because I have nothing to give…I dumped it all out at work. My husband and I have never really fought our whole marriage…but there's a couple of times since I started caring for these patients that we have actually slung some swear words at each other (Nurse #5).

Finally, one nurse reflected,

I would come home and just sob. I would get my car and cry. I would drive home. I'd get home, and I'd cry. I'd get in the shower, and try to calm down. Then I'd come out, and I would talk to my husband…then a lot of times I would hug my

69

kids, and be like alright now…I gotta go to bed. I was out. I just couldn't. I had to go straight to bed, and that was it (Nurse #20).

"My Family is Suffering Because of Me." Several nurses voiced feeling as though they were an emotional burden to their families. Nurse (#2) stated, "My husband…I feel like at one point he just stopped trying. He's always there for me but he just can't take the pain away and he knows that." Another nurse (#4) explained, "I feel like my family's suffering because I've just been not wanting to be around anybody…. I definitely have struggled with my husband and just kind of shut him out every now and then." Similarly, nurse #5 recounted, "It really brings out anxieties in me that I didn't realize I had. Some of those anxieties have transferred to my kids… as much as I don't want them to." Finally, one nurse reflected,

> I found that people that did support me, it was a big burden for them. My husband, it's a big burden for these last few years for him to try to help me through it…to emotionally support me. I feel like my family is suffering secondhand trauma (Nurse #12).

Coping with Family Roles and Responsibilities. Nurses also spoke on the effects of caring for patients with COVID-19 on their ability to cope with their family roles and responsibilities. One nurse stated,

> We're not robots. Every single one of us has a family, with a role to play and those people depend on us for certain things…so we come home and I mean not only is the bucket empty but there's no bottom to it anymore. It's just gone. Then the laundry piles up and the dishes pile up to the point that you know mold starts to grow on them in the sink. You start thinking of yourself as a failure because of

70

all these things that you can't do and you get stuck in this cycle of, "I can do all these heroic amazing things…and look at all the things that people are telling me that I am…" but then you start looking around and you're like…I just bought my kids new underwear because I don't have the energy to wash the ones we already have. That doesn't feel very heroic (Nurse #5).

Meaningful Support. Several nurses described how friends or family offered meaningful support to them while they were caring for patients with COVID-19. For example, one nurse stated,

I have a really supportive husband…. I feel like he's just been a great support and so on those days that are like particularly hard or some, you know, like, a lot of people died today, or you know so-and-so died that we took care of forever… he's just really supportive. He'll ask, "Okay, do you want to talk it out? What can we do?" I feel like he's always been that way, but I feel like he stepped into a really supportive role on a more daily basis (Nurse #7).

Another nurse (#8) remembered, "I had some reach out to me to say, 'Hey we're praying for you.' [tearfully] At least in my family they would reach out to say they were praying for me and to hang in there." A third nurse explained,

They [family] understood I couldn't just quit nursing and not take care of these patients. Nobody signed up for a pandemic but it's just what we have to do…we have to take care of these patients. So, my family was very supportive, and my extended family was very supportive (Nurse #10).

71

Similarly, a fourth nurse reflected,

> I asked my spouse if I became distant from her. She said no, but that it did feel
> like every single off night was a debrief…and I wasn't trying to! I didn't tell her a
> lot of stuff. What would be the point of telling specifics and making someone else
> as miserable as you? But…I guess I talked about it more than I thought that I did
> (Nurse #18).

In contrast to the exclusive support of close family, one nurse spoke of small supportive
actions which were provided by friends in the community:

> Sometimes they would make [thank-you] signs and put them in the parking lot. It
> was a nice gesture that made it a little easier to have positive thoughts and know
> that someone did notice…that they did care about us…elementary kids writing
> [thank-you] letters really touched our hearts. It helped me, and a lot of us, to feel
> like we could keep going (Nurse #15).

What Effects Have You Seen in Your Relationship with Your Colleagues?

The interview prompt, "What Effects Have You Seen in Your Relationships with
Your Colleagues While Caring for Patients with COVID-19?" led to a pattern of themes
two primary themes: a) bonded and b) challenges. Within those main themes are ten
subthemes relating to the effects of caring for patients with COVID-19 on relationships
with their colleagues. Themes are reflected in Table 4 below and are subsequently
discussed in further detail.

72

Table 4

Themes of Effects on Relationships with Colleagues

Main Theme: Bonded	Main Theme: Challenges
Sub-theme: Opening Up	Sub-theme: Empathetic Distress
Sub-theme: Supporting Each Other	Sub-theme: Traveling Nurses
Sub-theme: Helping Out	Sub-theme: Exodus of Experienced Nurses
-	Sub-theme: New Nursing Grads With High Turnover
-	Sub-theme: Ineffective Organizational Support
-	Sub-theme: Ineffective Debriefing Process

Bonded. Nurses reported that caring for patients with COVID-19 resulted in feeling bonded to their colleagues akin to "military deployment" (Nurse #2) from working "in the trenches" (Nurse #1) together. The theme "Bonded" encompasses the three subthemes of a) opening up, b) supporting each other, and c) helping out.

Opening Up. One nurse stated the following about the ways in which caring for patients with COVID-19 had changed the dynamic with colleagues:

One thing that I've seen that has been maybe just a little glimmer of good is the ICU nurses were always a very militant kind of like, "Suck it up…you can do anything for 12 hours." Remember? That goes through our heads; that's literally how we're trained. Then recently in the last six months, people have been like, "I'm suffering," and mental health is not as stigmatized as it has been for so long. ICU nurses…we never talked about our pain or our trauma. We never talked

73

about how it was to code an old man and feel every bone pop in his body…. If there's any glimmer of hope I think ICU nurses are being more open with their mental health crises (Nurse #2).

Supporting Each Other. Another subtheme was the support that nurses gave and received while caring for patients with COVID-19. For example, one nurse stated,

Honestly, people don't want to deal with how intense this stuff is… the people who are outside of our team. We can't talk to anybody else besides a trained provider, mental health provider. We can talk to each other. So, we're closer than ever and that at least is wonderful.

Similarly, one nurse (#4) reflected, "I can't tell you how many coworkers I've cried with. There's this reassurance from hearing what my coworkers are venting about, and I can finish their sentence in my head because I feel the exact same way." Nurse (#7) said, "I absolutely love who I work with and that's why I've stayed where I'm at." Another nurse (#12) expressed, "I'll always want to keep track of this group of people, probably for the rest of my life, because we've shared this experience and things that no one else can understand." Finally, another nurse (#18) said, "They understood everything that you felt, and everything that you were going through and what you needed."

Helping Out. Another subtheme was a significant increase in both receptiveness and offers of assistance on the unit while caring for patients with COVID-19. One nurse (#3) explained, "Now you are always on the lookout or listening out to see if anybody you know needed help." Another nurse reflected,

Before the pandemic, if someone if someone poked their head out of their room and was like, "Hey, I need this," people would be like, "Get it yourself." Now

someone pokes their head out and everyone is like, "Hey, what do you need?

What can I get you?" and that's just a basic change (Nurse #4).

Along those same lines, one nurse said,

We were trying to be very helpful for each other… just because some of these

patients were a lot of work. You had to be in tune with each other. Everybody has

to be a team player and help each other out (Nurse #10).

Likewise, one nurse (#13) urged, "We have to take care of each other." Another

nurse (#15) expressed, "The good things were the positivity that we would see in some

caregivers…stepping up and being there for each other and really helping each other out

with little things to make each other's day a little brighter."

Challenges. Along with the things that had improved, nurses also identified some

new challenges in the ICU within the context of COVID-19. Subthemes of challenges

were a) empathetic distress, b) traveling nurses, c) an exodus of experienced nurses, d)

new nursing graduates with high turnover, e) ineffective organizational support, and f) an

ineffective debriefing process.

Empathetic Distress. One of the most difficult challenges in relationships with

colleagues identified by nurses was seeing their colleagues suffer and empathizing with

them. One nurse (#1) said, "Many of them are burnt out and they're just so emotionally

taxed." Another nurse reflected,

It hurts my heart so bad to see them when they've taken that more personally as if

it's their fault, but it's been a heavier burden for them to bear the weight of caring

for these COVID patients. I think the hardest thing about COVID for me is to

watch my co-workers feel like that, and know I can't just put a band-aid on their

hearts or their mind. No matter how much I want to. I just can't. I don't have that

capability (Nurse #7).

Additionally, one of the nurses explained,

We have nurses that can't even return to work. They're in such bad shape and

these are nurses who have been doing it a long time. These are veteran nurses,

skilled nurses, the people that lead in ICU…and they can't come back to work.

Once the surge started up again, their capacity for mental health was so

diminished that they could not take any more. Right now, we're hurting (Nurse

#2).

Another nurse observed,

You see people cope in lots of ways. People internalize and shut down. They

become kind of hollow and just get through and that works for them…until it

doesn't. Other people will project it out and put everything they have into their

care. I just…wonder how long is that going to work (Nurse #5).

Similarly, one nurse (#15) noted, "You see those all those challenges…breakdowns,

burnouts, frustrations, crying, emotional shortness with each other." Another nurse

expressed,

Sometimes I've noticed my coworkers are just angry. That's hard on the team…

that's hard on my soul. That's when you want to pull someone aside and say,

"Hey, how are you coping?" …but you can't because you know you're going to

get your throat ripped out if you do. I would love to know how to work on that

(Nurse #16).

Traveling Nurses. Nurses noted that along with COVID came more traveling nurses and that having these rotating staff members exerted an impact on their ability to form relationships with their colleagues. One nurse (#1) stated, "We've had a lot of travelers, which makes it a little bit harder because you're not always working with the same people." Another nurse (#6) stated, "As a travel nurse I don't really know them, and they don't really get to know me." A third nurse (#20) noted, "You don't have as close of a relationship. Am I really going to sit and get emotionally involved with you when [I don't know if] you are really going to be around in two months?" Finally, one nurse explained,

> Everyone's starting to chase the traveler money. So, we're being betrayed for people going to "chase the Benjamins," but I don't blame them because I got a buddy right now in California making way better money doing the exact same thing I'm doing (Nurse #19).

Exodus of Experienced Nurses. Nurses shared a common challenge of relationships with colleagues was having experienced nurses leave the team during this time. According to one nurse (#11), "A lot of people left. Then the people that stayed felt abandoned, and the people that left felt guilty. That caused some turmoil." Another nurse (#13) stated, "I think it's changed nursing a lot in the sense of, a lot of those more established older nurses that have been there for years, moved on."

One nurse elaborated as follows:

> We've seen a lot of very experienced nurses just get burnt out. They've left. They go and do something else. They're leaving the ICU to go work in same-day surgery or to work in tele-critical medicine or anywhere away from

77

COVID…anywhere to get out of the unit. So, part of me feels abandoned and betrayed like, "You are my people. You are the people I looked up to and ask questions to for the last decade. You're gone, and I can't ask you questions anymore." I just feel like, "Why can't they be a little bit more resilient and just stay behind with us?" (Nurse #19).

Finally, another nurse (#20) stated, "ICU is kind of scary now because especially after my friend coded…we had a huge mass quitting…huge. Because we couldn't handle it. There's only so much you can emotionally handle."

New Nursing Graduates with High Turnover. Nurses noted the lack of prior medical experience in newly graduated nurses in the ICU can challenge the quality of their relationships with colleagues. For example, one nurse noted,

I always think about the novice nurse and how long it takes you to be an experienced nurse. On any given shift, I'm usually the most senior nurse on the unit, or there's only one other nurse that has more seniority than me, which is shocking and scary…when you try to apply critical care concepts to these direly ill patients (Nurse #6).

Another nurse explained,

When you get it out of nursing school you've sort of been taught what the ideal is, and obviously, that's not how it is when you actually start working. It's tough sometimes and frustrating to have to lay out [to a new nurse], "This is what's going on with my patient. This is what I'm going to need from you," versus saying [to an experienced nurse] "This is what's going on," and the other nurse goes,

"Okay, I'm here for you. This is what we need. I'll go get this for you," (Nurse #10).

Yet another nurse reflected,

I do see a difference in the nurses that have been there for 2 years versus the nurses that have been there 6 months or less. When I first started in the ICU, …the average experience level was like 20 years. Now to be considered a veteran ICU nurse is like 2 years. I don't think they understand all that is going on and all the dynamics that are happening, necessarily. They're still trying to learn (Nurse #12).

Nurse #13 stated,

You see tons of newer nurses, …and I think that's been a huge change in nursing. You used to gain experience and then after you were prepped [you] went to ICU…but now we have these days where brand new baby nurses are coming into the ranks and trying to step up and take care of these patients, and they've had no medical experience prior (Nurse #13).

Another nurse (#20) said, "Now because turnover is so high, they're orienting 20 new people at once, and they're all new graduates. We are literally having new grads, who are not even making it through orientation."

Ineffective Organizational Support. Several nurses also noted an absence of effective support provided by their organization resulting in high turnover, unrealistic expectations for current nursing staff, unsafe patient care scenarios. One nurse noted,

The strain of COVID just brought forward all of the strains on the health care system. The shortage of nurses, basically no assistance or backup from corporate.

79

At first, when there was no surge [of COVID patients] our organization told us,
"We'll have support. We have all these plans in place. We're going to help you
guys when things get really bad." Then when things got really bad, there was
nothing. It was a lot of high fives. They didn't even walk onto our unit. They
would go out to the waiting room and be like, "How is everybody?" They didn't
even want to come into the unit. Yet, they're making us take mandatory hours, and
then they're upping those, and still, on top of that, requesting more people to come
in saying, "Do your duty; this is your duty as a nurse." It put so much stress on us,
that I feel like it pushed a lot of people to leave (Nurse #11).

Another nurse stated,

I feel bad for the new nurses that are coming in because they don't know any
different. Even just the change over the years…. I've been a nurse now for almost
24 years, and the changes I've seen in my whole nursing career. Things have
definitely not improved… I think things have only gotten worse. There has been a
gradual trend towards worse staffing. I don't blame anyone right now if they leave
the profession, I get it. It's not being a quitter, it's hard (Nurse #8).

Ineffective Debriefing Process. Another significant effect of caring for patients
with COVID on relationships with colleagues was an ineffective debriefing process after
sentinel events. As an example, one nurse stated,

We've had some pretty nasty incidents that our leadership tells us to call our
counseling office for debriefing, but then when they get there into the room full of
freshly traumatized health care providers who start talking about what
happened…they shut it down every time. They tell us we're not here to "debate

the case." We are scientists. We can't skip the process and jump right to our feelings. So, then you have people that just sit in a room, in a circle, and stare at each other. Then the counselor gets frustrated that nobody's talking and they yell at you. They're like, "Come on guys, what are you feeling?" I'm feeling that you're yelling at me, and that's not helpful…that's what I'm feeling. So, they're really not helpful. The only thing that people get out of these group counseling sessions is that they can see by the number of people that are in that they're not the only one that is hurting. Some of us have been doing this for more than a decade. We have a lot of new ones [nurses] but I mean most of us have been doing this for more than a decade. We have a lot of barriers that you have to bring down, and then some of that is stoicism. Plus, this is just what we do…but we're all still human beings (Nurse #5).

What Effects Have You Seen in Your Relationships with Patients?

The interview prompt, "What effects have you seen in your relationships with patients?" revealed three themes regarding the effects of caring for patients with COVID-19 on relationships between ICU nurses and their patients. These themes included: a) a predictive pattern, b) connecting with the patient anyway, and c) COVID-specific barriers to patient care. These themes are presented in Table 5 and discussed in detail below.

Table 5

Themes for Effects on Relationships with Patients

Main Theme	Sub-Theme 1	Sub-Theme 2	Sub-Theme 3
A Predictive Pattern	-	-	-
Connecting Anyway	-	-	-
COVID-Specific Barriers to Patient Care	"They Didn't Believe in the Virus"	Refusing Treatment	Rejection By The Community

A Predictive Pattern. Participants referenced patterns noted in patients with COVID-19 which indicate the outcome will be poor for that patient despite medical interventions. One nurse (#1) explained the noticed pattern as follows: "Right now, they're on BIPAP at 100%, but next week, they'll be intubated. It was almost by the book…you can call it."

Another nurse said,

> For the first little while, I was always talking to them first to try to give them a heads up on what they might experience, what this COVID thing was going to do to them, and try to help them understand that if they get worse that they could die…. By the time they're intubated then you're likely not going to have a conversation with them ever again. They're never going to talk back because they're going to die (Nurse #19).

Likewise, one nurse stated,

> I know what direction he's going. I'm watching you be on high flow and then I know you are going to end up intubated, sedated, paralyzed, prone, and then you

will die…you're dead. You're still talking right now, but you are a dead body (Nurse #20).

Connecting Anyway. Nurses described why (or when) they still connect with their patients despite the presence of a predictive pattern. One nurse stated,

I remember looking in the face of this woman at the beginning. This is probably the moment that was hardest. And she said, "Please don't let me die," and then she never talked to anybody ever again. My God, it was just terrible (Nurse #2).

Another nurse explained,

I try to not let my heart get like calloused. Like, "You might pass away or you might have a bad outcome so I'm just not going to get to know you at all." I don't want to be like that (Nurse #7).

Nurse #9 said, "These people are dying by themselves. They never touched the skin of another person again. Like we're in these glorified garbage bags trying to do everything we can." Another nurse (#13) elaborated,

You have this very guarded sick person who has no idea what's going on with them. You're coming in their room in this get-up and I think that for them [the patient] it's that moment of, "How do I let this person in and trust them when they act like I have the plague and won't even touch me?" (Nurse #13).

Furthermore, one nurse recounted,

There was a month or two where it kind of calmed down a little bit and we did have a few patients who were on the BIPAP, and they waited a long time before intubating them. I got to know them pretty well, and then they all passed and that sucked…a lot (Nurse #14).

Another nurse (#17) said, "It's just a long process…so you become way more invested in them and that aspect of it really doesn't ever get easier because you really do form an attachment." To illustrate this, one of the nurses shared,

> I think probably the most profound case I will never forget is for the rest of my life was this high school class president, going to college, working two jobs to pay for school. He got COVID from one of those two jobs. He was on our unit for 4 months, and he eventually died. By the time he died, his hands and feet were black. Well, I mean his feet and his one hand were black, one arm had been amputated. He lost all of his hair, and he looked like a 75-year-old man. He looked older than his own father. It was harrowing. A lot of us said that this was a horror movie worse than any horror movie anybody could create…even in the grossest, deepest recesses of a twisted mind (Nurse #18).

COVID-Specific Barriers to Patient Care. Nurses often describe how COVID-19 has affected the delivery of nursing care. A few examples given include the following:

- limiting connection in the nurse-patient relationship (by circumstance or choice)

- medical mistrust, media misinformation, political agendas

- environmental factors (short staffing, resources, poor patient outcomes)

- threats/verbal abuse/violence against nurses

- changes in nursing practice based on limiting medical provider exposure

"They Didn't Believe in the Virus." Nurses also discussed caring for COVID-19 positive patients when the patients themselves (or their families) did not believe that the

virus existed. One nurse (#12) said, "I found that it was hard to convince patients to do the treatments when they didn't believe in the virus." Another nurse remembered,

One family that did not believe in COVID had a party with about 100 people…and most of them got it. One ended up in our ICU and he eventually passed away. We had a really good relationship with the patient, and they were very grateful for the care that we gave right up until the moment that the patient passed. The patient's family, on the other hand, still didn't believe in COVID and thought we had been trying to kill the patient. One of the family members threatened the lives of our nurses at the time that the patient passed. Nothing came to fruition from it, but the authorities were notified and the threats were still very real to our nurses. That was scary… to think that you're going to be "taken out" going to your car in the parking lot. Feeling like you're in danger from a new and deadly virus as well as from the patient's family members were you know…a pretty different challenge (Nurse #15).

Refusing Treatment. Nurses noted some patients who are admitted to the hospital with COVID-19 may have attitudes or behaviors that affect the nurse-patient relationship and delivery of care. One nurse stated,

We had an example of a patient that needed some blood, and they went as far as to ask, "Has the donor of this blood had the vaccine? If they've had the vaccine then I don't want that blood." The patient really needed the blood, they were very anemic. Whether or not a blood donor had been vaccinated should have been a non-issue. Just really strange ideas…it makes me think; are we really to this

point? Sometimes their families would tell us, "The treatments you're doing are killing them." That really, really affected me (Nurse #15).

Another nurse recounted,

We started seeing patients that were ordering treatment options online, you know, treating themselves at home. People have a right to refuse treatment, but I also felt that I wasn't giving them the full care or the best chances of getting better because they weren't allowing us to treat them. Those patients ended up staying longer. Their outcomes were worse. My hospital has been pretty much full every day, and if the census goes down, where there are one or two beds available, it doesn't last. It was frustrating to have to hear of people waiting in the ER wanting help from us and then not having an open bed while someone who's in an ICU bed is not wanting to take full advantage of what we had to offer to help them get better (Nurse #10).

Nurse #11 stated, "They [patients] asked us [when getting meds], 'What are you pushing? Are you trying to sneak me the COVID vaccine?'" Another nurse (#16) reflected,

I've been a nurse for going on 17 years, and I've never been involved with patients or families that are saying, "Hey, I've done all this research, and we're not going to take this medication. We want to take this medication [instead]." It's a very new dynamic. I see these people that should be otherwise healthy but now they can't tolerate wearing oxygen. All of us who've cared for COVID patients know that seems to be a very big problem. The thing that's going to save your life is the thing that people can't do. They say, "It's blowing too much into my nose; it's

hurting my ears… it's too loud." That's just a nasal cannula, and then you see this

path of thinking and it's like…they really think we're trying to kill them…and

these people do not cope well. We see people that basically die because they can't

manage their anxiety, and we can't manage their anxiety for them, and therefore

they aren't able to tolerate the care that they need (Nurse #11).

Nurse #3 also explained,

The ones that feel like you have done something to make their loved one worse,

or you're not doing enough, or they're on the internet reading about all these other

types of treatments that are not recommended and they want you to do those

things. Then you know they're calling you all confident and just using negative

words that you shouldn't have to put up with when you're on the job. The words

aren't so bad as when they start threatening you know and saying they're going to

come back for you after work. We're here taking care of your person and then you

threaten the healthcare people. It's just…it's crazy (Nurse #3).

Rejection by the Community. One of the more prominent subthemes of COVID-

specific barriers to patient care was the rejection of medical advice by the community.

For example, one nurse (#2) remembered,

We had this horrific code with a young man and we were all sobbing. We were

crying in his room in our PAPRs. One person would come out and we'd hug

them, and then the next person would filter in [for chest compressions]. [After he

passed] I put his dead wife into bed with him to hold him and hug him for the last

time and then we walked out to 1600 people protesting masks in front of our

hospital, hooting, and hollering. The hardest part of that was his family couldn't

even get through the traffic [from the protest] to say goodbye to him while he was

still kind of [mentally] there.

What Does it Mean to You to be an ICU Nurse Caring for These Patients?

Themes of meaning varied widely from nurse to nurse depending on their

identified core purpose of nursing. Four overall themes were identified: a) "keep them

alive," b) "we are survivors," c) "I am an ICU nurse," and d) "I was meant for this."

These themes are represented in Table 6 below and discussed in further detail

individually.

Table 6

Themes of Meaning

"Keep Them Alive"
"We Are Survivors"
"I Am An ICU Nurse"
"I Was Meant For This"

"Keep Them Alive." A theme reflecting the nurse's role in caring for patients with

COVID-19 is to prolong life. One nurse (#1) stated,

Keep them alive until we can't, or until it gets bad enough that family can make

that decision. It is ethically really difficult as a nurse to constantly be doing things

that you know are futile, are potentially causing the patient pain, or prolonged

pain (Nurse #1).

Another nurse (#2) responded, "Pain and suffering. They're coding left and right. I

feel like ICU nursing is pain…emotional pain, and physical pain…there's so little joy

anymore. I don't think it's worth it anymore. It's not worth it for me." Correspondingly, another nurse stated,

> I am the one that's helping to provide the last effort of care and comfort to them. Your hands are not healing hands when you are doing this, your hands are hands of comfort to help people in their final hours. There's nothing else to do. I do feel some days that I'm fighting a losing battle (Nurse #3).

Similarly, one nurse (#18) expressed, "It means to be a compassionate caregiver because you're consistently listening to the grief of the families on the phone…. More of them are dying than I've ever seen before." Another nurse (#5) explained, "I've loved my time caring for patients with COVID-19 in the ICU…but I don't want to do it anymore." Finally, one nurse (#20) reflected, "We can't burn ourselves, destroy ourselves for the nobility of being a nurse."

"We Are Survivors." Another meaning participants reported was to "survive" caring for patients with COVID-19 by staying in the ICU. One nurse reflected,

> I think that's something that has really changed in me. It's the human side of things. I am taking care of the patient, the same as I did, but I feel a connection with them more as human beings now. I think what sustains us as nurses is the human aspect of it. I think that having a human connection is healing for everyone. It's healing for the patient and to be honest, I think it's healing for the nurses too (Nurse #10).

Another nurse elaborated,

> I would say we're survivors, the nurses that stuck around. You know we're survivors that care for our patients and we do everything we can and we want to

see success. I want to see the end. I'm going to stick with it because I want to get

to the end of this. I want to see the outcome (Nurse #12).

Nurse #13 also stated, "I think it's definitely something that showed us as a profession

that we can be resilient…and still give compassionate care to our patients." Finally, nurse

(#14) expressed, "I feel like it's important to see this through and to continue to strive to

give care to these patients."

"I am an ICU Nurse." The third meaning reflected embracing caring for patients

with COVID-19 as an extension of the role of an ICU nurse. One nurse (#7) stated, "I

love what I do, and yes, it is hard. It is a trial, but I'm still very proud to say, 'I do take

care of COVID patients. I take care of any type of patient. I'm a nurse.'" Another nurse

said,

To be an ICU nurse means to make a difference in the way you care for patients

but also hopefully have a good outcome for them. Caring for patients during

COVID, I don't think it was any different. It meant the same as taking care of

someone who's there in a car accident (Nurse #11).

Similarly, nurse #17 stated, "I still feel like an ICU nurse I am privileged that I get to take

care of these critically ill patients and that it's a very interesting time to take care of

people that are so sick." Along those lines, yet another nurse expressed,

Quite honestly, and maybe my wife will laugh at this, but consider myself a hero.

I don't get the magic cape, but I got magic scrubs on. I can work anywhere in the

hospital I can take care of any patient. I know what to do if things go wrong.

It…empowers me. When people ask me, "What do you do?" I make sure to say,

"I'm an ICU nurse," and a lot of people say, "I could never do your job." So,

working with COVID in the ICU, I've been in the trenches taking care of these

people. I am the guy (Nurse #19).

"I Was Meant for This." In the theme, "I Was Meant for This," nurses reported

feeling as though they were meant to be in the ICU as a nurse during this time. As an

example, one nurse (#4) stated,

I feel like as hard as it is on me emotionally, mentally, physically…I'm in the

right place right now. It's almost like a calling… I always wanted to be a nurse to

help people and right now people need nurses so that's where I should be

(Nurse #4).

Another nurse (#9) reflected, "I feel like I was meant to go through this, and we

have to be a better person and a better nurse…. Now I'm training everybody."

Evidence of Quality

Findings of this study reflected several emerging understandings into the lived

experience of the ICU nurse while caring for patients with COVID-19. In order to

preserve the trustworthiness of this study, several methods for ensuring the credibility of

this study were employed. To further ensure the validity and reliability of these findings,

dependability, confirmability, and transferability are also discussed (Peoples, 2021).

Credibility. Credibility of this study was preserved by assuring that data received

and interpreted was consistent with the intent of the nurses being interviewed.

Accordingly, credibility of this study was achieved primarily through member checking,

reflective journaling, triangulation of data, and external audits. Member checking

occurred during the interviews via Zoom using clarifying questions and restating

messages to establish participant intent and meaning. After data analysis, member checks

were also performed via phone or email with one-third of the participants to amply

guarantee the clarity of nurse intention for underlying meanings and application to

categories, patterns, and themes (Birt et al., 2016; Creswell & Creswell, 2018; Creswell

& Poth, 2018). Discussed methods of member checking were chosen specifically to fulfill

the "fusion of horizons" mentioned by Heidegger (1971) in which the participant and the

researcher work together to discover a new meaning of the lived experience through

dialogue. Reflective journaling was also employed by the researcher to identify and limit

areas of potential bias during data analysis. Triangulation of data was used through

comparing multiple interview transcripts and data analysis with research from the

literature review of this study as well as additional written or recorded interviews

submitted by the participants to substantiate their experiences. Finally, external audits

were utilized during data analysis to ensure that both codes and themes were amply

supported by the data before the interpretation of findings.

      Transferability. Understandings gathered from the lived experiences of these ICU

nurses may be similar to insights found in other ICU nurses who have had similar

experiences. When considering the transferability of these findings, it was necessary to

consider the participants, setting, and experiences before generalizing these findings.

However, the themes regarding this phenomenon held the potential to offer greater

understanding for members of the nursing profession (both current and aspiring), patients

and their families, and medical leaders.

      Dependability. A detailed explanation of this process for obtaining and analyzing

data was provided and utilized to maintain the dependability of this study. Researchers

who repeat these steps for further exploration into the same phenomenon within a similar

context, setting, and timeframe should discover comparable results. The audit trail used for this study may be found in both Chapter III and is also described as carefully implemented at the beginning of Chapter IV.

Confirmability. In order to protect against personal bias, this researcher noted areas of potential bias in Chapter III. The researcher used reflective journaling to make personal biases explicit and anticipate any potential interference into the quest for emerging understandings. The researcher concentrated on full immersion into the lived experiences of these ICU nurses throughout the continual emergence of distractions and bias. The central and consistent goal throughout this study was to replace this researcher's conceptions at the time with new and more trustworthy ones using the process of reflection.

Through journaling, this researcher revised personal biases, and those biases created new questions which were requisite for thought revision (as illustrated by the hermeneutic circle). Each revision of this researcher's preconceptions illuminated a new meaning, along with competing interpretations that surfaced simultaneously. Ultimately, the unification of both nurse intent and meaning was made explicit.

Summary

Chapter IV has reviewed the process by which data was generated, gathered, and recorded. Data explication and analysis are reiterated for the dependability of the study. Data are discussed, including themes and subthemes relating to the primary research questions. Evidence of quality is reviewed, including processes for ensuring the trustworthiness, validity, and reliability of the findings. Emerging understandings and applications of these findings will be further discussed in Chapter V.

CHAPTER V – DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Care of critically ill patients with COVID-19 in a hospital setting predominantly involves ICU nurses. Despite this reliance on the continued resilience of these nurses physically, mentally, and emotionally, little is currently known about their lived experience. Along those lines, little is known about the effects these nurses have seen on their intrapersonal and interpersonal relationships. Insights gained by these nurses have the potential to significantly influence current and future members of the nursing profession, their families, their patients, medical leaders, and medical policymakers. These factors culminated in the need for further exploration and support the purpose of this study (Alrhrabi et al., 2020; Ardbili et al., 2020; Bennett et al., 2020; Demirci et al., 2020; Galehdar et al., 2020; Gao et al., 2020; Garcia & Calvo, 2020; Gordon et al., 2021; Johnson & Parreco, 2020; Master et al., 2020; Montauk, 2020; Munawar & Choudry, 2021; Tosepu et al., 2021).

Design, Data Collection, and Analysis

Design of this study employed a hermeneutic lens of interpretive phenomenology to provide a holistic depiction of insights gained by ICU nurses about their lived experience caring for patients with COVID-19 (Peoples, 2021; Polit & Beck, 2004; Streubert & Carpenter, 2011). Application of hermeneutics in nursing has been termed the *science of interpretation* in nursing; it holds the ability to bring messages about this experience out of current obscurity and into the realm of understanding and practical application (Benner, 1994; Palmer, 1969). Heidegger (1971), the author of hermeneutics, endorsed this practice as identification of preconceptions, synthesis of new information,

94

and continual learning through an ongoing process of revising current understanding. Semi-structured interviews were conducted with participants based on the research questions and data were analyzed to identify codes and patterns, resulting in an emerging understanding of key categories and themes of the ICU nurse's lived experience using Benner's (1994) method of interpretive data analysis. Member checking, an audit trail, triangulation of data, external audits, and reflective journaling were all used to protect the integrity, trustworthiness, validity, and reliability of the findings (Benner, 1994; Creswell & Creswell, 2018; Creswell & Poth, 2018; Peoples, 2021).

Research Questions

Research questions for this study remain as follows:

- What is the lived experience and meaning of being an ICU nurse caring for patients with COVID-19?

- What effect has caring for patients with COVID-19 had on ICU nurses' relationships with the self, their loved ones, their colleagues, and their patients?

Summary of Findings

Findings of this study identified key emerging themes relative to the primary research questions. Findings were based on data collected from nurse interviews regarding their lived experience caring for patients with COVID-19. Themes and sub-themes are reviewed in greater detail in Chapter IV.

Question One: The Lived Experience

The lived experience of the ICU nurse was categorized into four themes and two subthemes: "That Wears on You"; Professional Context – Environmental Factors and

Medical Mistrust; Personal Responses, and "Nursing Was…." Each theme regarding the

first research question is represented in Table 7 below.

Table 7

Research Question 1: The Lived Experience and Meaning of Being an ICU Nurse

Topic	Theme 1	Theme 2	Theme 3	Theme 4
Lived Experience	"That Wears On You"	Professional Context Sub-themes: *1)* Environmental Factors *2)* Medical Mistrust	Personal Responses	"Nursing Was…"
Meaning	"Keep Them Alive"	"We Are Survivors"	"I Am An ICU Nurse"	"I Was Meant For This"

"That Wears on You". Each theme represented a key aspect of the lived

experience as interpreted by ICU nurses. For example, "That Wears on You" was

reflected by almost every participant during the interview process regarding

unprecedented amounts of patient death and loss of control to influence patient outcomes.

One nurse (#19) stated, "I was alone with a lot of people that died…and that wears on

you." Another nurse (#20) reflected, "people basically disintegrated in the bed."

Professional Context: Environmental Factors and Medical Mistrust. Along with

poor patient outcomes, many participants provided rich context on the professional

environment in which caring for these patients occurred. Factors included short staffing, hospitals operating at max capacity, and overall insufficient resources to care for patients based on normal nursing standards. One nurse (#14) reflected, "We just don't have the resources available to give like basic care…I can't be in all these rooms at once!" Medical mistrust also seemed to play a dominant role in the nurse's experience of caring for patients with COVID-19. Participants discussed the effects of political agendas, media misinformation, and rejection of medical advice by their communities. Narratives reflected these nurses experienced verbal abuse, threats, and violence specifically relating to their care of patients with COVID-19. One nurse (#2) stated, "at first we were heroes, and now we're all devils." Another nurse (#20) shared, "people don't appreciate what we're doing…what we're fighting for."

Personal Responses. Nurses reflected on the feelings, behaviors, and thoughts they have been experiencing since the beginning of the COVID-19 pandemic. The top five descriptors used by ICU nurses were frustration, fear, anxiety, grief, and exhaustion. One nurse (#20) stated, "COVID has damaged nurses in ways that nothing can ever describe."

"Nursing Was…" The main theme for nurses was reflecting on how their own nursing practice and attitudes had been compelled to change while caring for patients with COVID-19. One nurse (#13) stated, "I feel like it really changed what nursing has always been." Another nurse (#10) shared, "that's something that has really changed in me…having a human connection is healing for everyone."

Research Question One: The Meaning. Exploring meaning in research question one illuminated four emerging themes based on the experiences of ICU nurses. They are:

97

"Keep Them Alive"; "We Are Survivors"; "I Am An ICU Nurse"; and "I Was Meant For This." Each theme is discussed in detail below.

"Keep Them Alive." The theme, "Keep Them Alive," reflected a meaning interpreted by ICU nurses as their primary role is to prolong life despite a predictive pattern of poor outcomes. One of the nurses shared, "Keep them alive until we can't…It's ethically really difficult…causing the patient pain or prolonging the pain." Another nurse (#20) stated, "We can't burn ourselves, destroy ourselves, for the nobility of being a nurse."

"We Are Survivors." In the theme, "We Are Survivors," nurses seemed to view remaining an ICU nurse throughout the COVID-19 pandemic as a form of survival. One nurse (#12) stated, "I would say we're survivors, the nurses that stuck around." Another nurse (#13) shared, "It's definitely something that showed us as a profession that we can be resilient."

"I Am An ICU Nurse." In the theme, "I Am An ICU Nurse," nurses expressed pride in their ICU nursing role. They also endorsed caring for patients with COVID-19 as a "badge of honor," (Nurse #19) or an advanced extension of traditional critical care nursing. One nurse (#7) stated, "I do take care of COVID patients. I take care of any type of patient. I'm a [ICU] nurse." Another nurse (#17) shared, "as an ICU nurse I am privileged that I get to take care of these critically ill patients." A third nurse (#19) shared, "I consider myself a hero…I got magic scrubs on…I can take care of any patient."

"I Was Meant For This." Nurses in the theme, "I Was Meant for This," expressed feeling destined to be in the ICU during the COVID-19 pandemic caring for these

patients. One nurse (#4) shared, "It's almost like a calling." Another nurse (#9) stated, "I was meant to go through this to be a better person and a better nurse."

Question Two: Effects on Relationships of ICU Nurses

The second research question for this study was divided into a) relationships with the self (four themes), b) loved ones (six themes), c) colleagues (two themes), and d) patients (three themes). Each set of themes represented a distinct series of effects on nurses' intrapersonal or interpersonal relationships. Nurses viewed these effects as being linked to caring for patients with COVID-19. Themes are further discussed in detail below with corresponding tables to represent main and sub-themes (when applicable).

Self: Recognize, Respond, Purpose, and Plan. Each nurse identified effects within themselves that they recognized as being symptomatic of caring for patients with COVID-19. These themes are represented in Table 8 below. Such recognition led nurses to respond using coping tools. Based on the results of those coping tools, nurses found themselves evaluating and redefining their core nursing purpose. After their nursing purposes were re-designed, nurses made a plan for continuing forward that would allow them to stay in the nursing profession based on their values. One nurse (#20) stated, "I needed to leave nursing altogether or I make a dramatic change. And that is happening in droves right now."

Table 8

Research Question 2: Themes of Effects on Relationship with the Self (Dasein)

Recognize
Respond
Purpose
Plan

Loved Ones. Six more themes emerged under the category of effects on relationships with the ICU nurses' loved ones: a) Isolation From Family and Friends; b) "They Don't Get It"; c) "Zero Left To Give"; d) "My Family Is Suffering Because Of Me"; e) Coping With Family Roles and Responsibilities; f) Meaningful Support. Each of these themes is represented in Table 9 and will be discussed individually.

Table 9

Research Question Two: Themes of Effects on Relationships with Loved Ones

Isolation From Family and Friends
"They Don't Get It"
"Zero Left To Give"
"My Family is Suffering Because of Me"
Coping With Family Roles and Responsibilities
Meaningful Support

In the theme "Isolation from Family and Friends," one nurse (#1) stated, "I felt totally disconnected." Another nurse (#5) said, "I was the leper on the street because I

worked with the plague patients." These experiences tied into the next theme, "They

Don't Get It." In this theme, nurses expressed difficulty communicating with their non-

medical friends and family in a way that they felt their experiences were understood.

Similarly, another effect of caring for patients with COVID -19 on ICU nurses'

relationships with loved ones was the theme "Zero Left to Give." In this theme, nurses

reported their relationships with family members experienced a deficit of engagement

relating to extra energy and resources being spent at work. One nurse (#2) explained, "I

could not regulate my emotions." Another nurse (#5) stated, "I have nothing left to give."

Based on the above themes, many nurses expressed concern for the welfare of

their families as an effect of ICU nurses caring for these patients. Such concern is

reflected in the theme "My Family is Suffering Because Of Me." One nurse (#12) stated,

"my family is suffering the secondhand trauma." Other nurses shared more direct

concerns regarding their participation in their family roles in the theme, "Coping with

Family Roles and Responsibilities." One nurse (#5) stated, "I just bought my kids new

underwear because I don't have the energy to wash the ones we already have. That

doesn't feel very heroic."

However, several nurses noted in the theme Meaningful Support that the

community, friends, and family stepped up to show support during their care of patients

with COVID-19. For example, one nurse (#8) shared tearfully, "They would reach out to

say they were praying for me and to hang in there." Another nurse (#15) spoke of the

efforts of their community to thank ICU nurses and shared, "It helped me, and a lot of us,

to feel like we could keep going."

Colleagues. Nurses described effects on their relationships with colleagues in two themes: a) bonded and b) challenges. Bonded had three sub-themes of a) opening up, b) supporting each other, and c) helping out. Challenges had six sub-themes of a) empathetic distress, b) traveling nurses, c) exodus of experienced nurses, d) new nursing graduates, e) ineffective organizational support, and f) ineffective debriefing process. Each of these themes and sub-themes is represented in Table 10 below.

Table 10

Research Question Two: Themes of Effects on Relationships with Colleagues

Main Theme: Bonded	Main Theme: Challenges
Sub-theme: Opening Up	Sub-theme: Empathetic Distress
Sub-theme: Supporting Each Other	Sub-theme: Traveling Nurses
Sub-theme: Helping Out	Sub-theme: Exodus of Experienced Nurses
-	Sub-theme: New Nursing Grads With High Turnover
-	Sub-theme: Ineffective Organizational Support
-	Sub-theme: Ineffective Debriefing Process

Patients. Nurses described the effects of caring for patients with COVID-19 on the nurse-patient relationship in three themes: a) a predictive pattern, b) connecting anyway, and c) COVID-specific barriers to patient care. In the theme "a predictive

pattern" nurses expressed challenges associated with caring for patients who demonstrated signs of an ultimate poor outcome. Within the theme, "connecting anyway," nurses chose to connect with patients who they anticipated a poor outcome for despite knowing the likelihood of resulting grief at their passing. Finally, in the theme, "COVID-specific barriers to patient care," three sub-themes are identified by nurses. These consist of a) "They didn't believe in the virus"; b) refusing treatment, and c) rejection by the community.

<div align="center">Interpretation of Findings</div>

Interpretation of themes and patterns are organized according to their corresponding research question. Research question one addresses both the lived experience of the ICU nurse and the meaning of being an ICU nurse caring for patients with COVID-19. Research question two addresses the effects of caring for these patients on intrapersonal and interpersonal relationships of the ICU nurse. These findings are consistent with current research and other identified themes from qualitative inquiry into the experiences of FLWs and ICU nurses caring for patients with COVID-19 (Guttormson et al., 2022; Villar et al., 2020).

Research Question One: The Lived Experience and Meaning

Nurses expressed their lived experiences using narratives and rich details of both personal and professional contexts. They discussed initial reactions to caring for patients with COVID-19 and how those reactions, thoughts, and beliefs had changed based on their interpretations of the lived experience as they continued to participate in this phenomenon. Lived experience was described by nurses in the theme "That Wears On You" to illustrate the toll of caring for patients who had "overwhelmingly bad outcomes"

(Nurse #11). Professional context, as told by these nurses, included caring for critical patients using limited: a) staff, b) equipment, c) hospital beds, and d) resources. Nurses expressed significant moral distress and grief at being unable to provide patients with good quality of care and human connection during these shortages. One nurse (#19) stated, "COVID was completely out of our hands." These findings corresponded with the literature reviewed in Chapter II amongst FLWs caring for patients with COVID-19 in a dedicated COVID-19 facility in Qatar (Villar et al., 2020).

Nurses also expressed distress and grief at misinformation being distributed by media sources to the general public, which appeared to connect treatment of a medical disease with political agendas and contributed to the theme of Medical Mistrust. Ultimately, medical mistrust led to barriers in treating patients and created an adversarial relationship with patient family members. These findings correlated with challenges identified in other studies regarding ICU nursing during this time period (Guttormson et al., 2022; Moradi et al., 2021; Villar et al., 2020). Personal responses to caring for patients with COVID-19 varied with the individual, but frustration, fear, anxiety, grief, and exhaustion were predominantly prevalent in most participants. Throughout the interview process, nurses reflected almost nostalgically on nursing practices before the emergence of COVID-19 in the theme "Nursing Was…". Nurses compared how their nursing techniques and attitudes were compelled to change based on new guidelines, protocols, and staffing shortages. One nurse (#3) stated, "We were used to running in and saving people's lives."

Meaning. Nurses interpreted four meanings from being an ICU nurse caring for patients with COVID-19. Despite the many mental, emotional, and physical challenges of

caring for these patients, seventy-five percent of nurse interpretations were positive. These interpretations varied based on the nurse's individual core purpose of nursing and the result of a cost-benefit analysis by the ICU nurse. These findings are consistent with the identification of shifting priorities in ICU nurses caring for patients with COVID-19 noted in current literature (Gordon et al., 2021; Guttormson et al., 2022; Villar et al., 2021).

"Keep Them Alive." The first identified theme of meaning was "Keep Them Alive," explained as preserving life despite apparent patient suffering and the predictive pattern of a poor outcome long term for the patient. Nurses reported their main role was prolonging life in the hope of a recovery that was rarely achieved for patients past a certain point. Nurses communicated feelings of moral distress relating to prolonging patient suffering and family's hope regardless of the predictive pattern which patients demonstrated ultimately leading to poor outcomes or death. Nurses expressed struggling to believe that ICU nursing was still, "worth it," and seemed to endorse a deontological view of their experience in which the moral weight of the actions these nurses had performed outweighed any potential good that may have come from those actions.

"We Are Survivors." In the theme, "We Are Survivors," nurses expressed feelings of pride because they had made it this far in the pandemic and were still fulfilling their role as ICU nurses despite the many challenges they had faced. Nurses seemed to endorse a utilitarian view in which the struggles and hardships they had experienced while caring for patients with COVID-19 would ultimately be validated or "worth it." Nurses explained this validation would be achieved by a good overall outcome, such as an end to the COVID-19 pandemic.

"I Am An ICU Nurse" Nurses who fell into the theme, "I Am An ICU Nurse," seemed to interpret caring for patients with COVID-19 as more of an extension of their regular nursing role. These nurses continued to view caring for patients with COVID-19 using traditional nursing standards such as forming healing human connections, advocating for their patients, and learning from outcomes to better improve future care. Nurses often verbalized feeling helpless, frustrated, and an overall lack of control regarding patient outcomes.

"I Was Meant For This." The theme, "I Was Meant For This," addressed a subset of nurses who felt they were meant to become better nurses and humans because of their lived experience (Nurse #9). Nurses also expressed feeling empowered (Nurse #19) by their ability to care for critical patients with COVID-19 (Nurse #17). Nurses expressed feeling as though nursing patients with COVID-19 was, "A calling" (Nurse #3). Another nurse stated that there was, "nowhere else I'd want to be right now," (Nurse #4).

Research Question Two: Effects on ICU Nurse Relationships

Nurses discussed effects seen in both their intrapersonal and interpersonal relationships. Themes culminated in a greater understanding of how nurses see caring for patients with COVID-19 affected their personal and professional quality of life. Each relationship was discussed in further detail below.

The Self. Nurses reported a cyclical process of nursing self-discovery similar to an awakening. Nurses recognized the effects (or symptoms) of caring for patients with COVID-19, responded to those effects, evaluated their core purpose of nursing, and then planned for their future as a nurse. Nurses' experiences with such a process are illustrated in Figure 8.
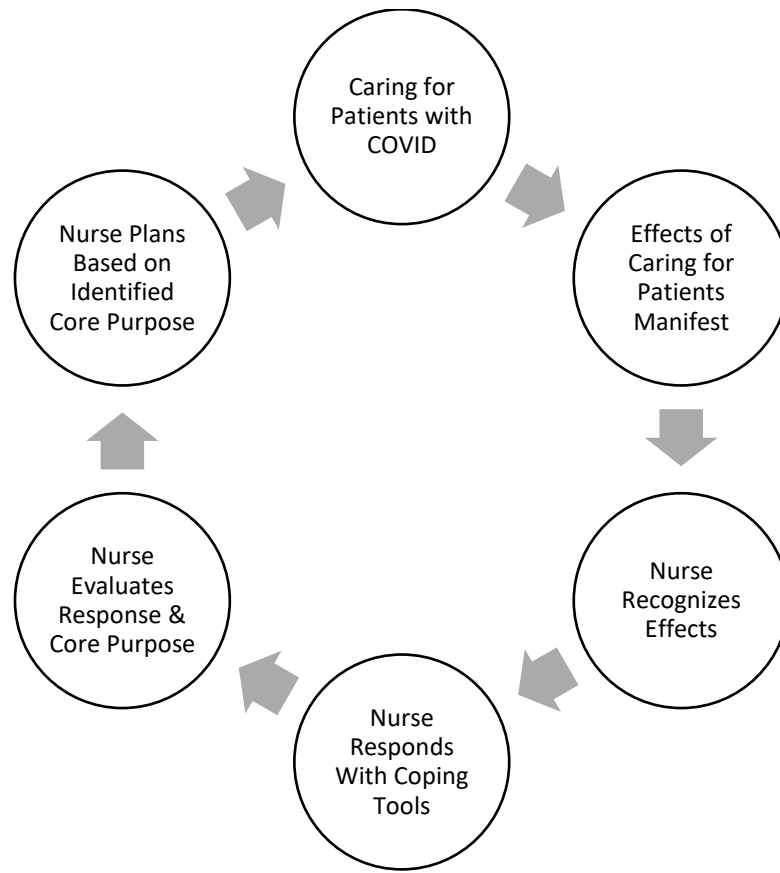
106

Figure 8. The Process of Nursing Self-Discovery.

Effects and symptoms described by ICU nurses corresponded with physical and psychological findings in FLWs caring for patients with COVID-19 (Bennett et al., 2020; Gordon et al., 2021; Guttormson et al., 2022; Liu et al., 2020; Tosepu et al., 2021) One nurse (#3) described this process before making her plan of action for the future, "I had a complete meltdown…nursing has always fulfilled me…it's my calling…everybody just keeps dying in the ICU with COVID…I have never been so ready to leave nursing." Nurses described their responses with everything from therapy, medication, exercise, alcohol, nature therapy, listening to music, actively numbing, or simply changing their focus. Most nurses expressed they were still searching for "relief" from their symptoms but had found things that lessened the pain. Findings correlate with the need for enhanced

coping found in FLWs dealing with unprecedented challenges (Galehdar et al., 2020; Guttormson et al., 2022). Core nursing purposes often changed from a curative standpoint to refocusing on other aspects of personal and professional wellness. Nurses expressed the need to find something besides patient outcomes to measure their efforts and successes. Most participants (70%) found they planned to decrease their time caring for patients with COVID-19 in the ICU or change their nursing role altogether. Findings corresponded with ICU nurses in other studies who communicated an intention to leave if their symptoms and the root cause (caring for patients with COVID-19 with insufficient resources) remained unaddressed (Guttormson et al., 2022; Li et al., 2020; Lorente et al., 2020).

Loved Ones. Nurses discussed the effects of caring for patients with COVID-19 in terms of their relationships with their loved ones. Almost all participants expressed the theme of "isolation from family and friends." Feelings of isolation could stem from the efforts of either the nurse or their family/friends. Rationale for this social isolation was verbalized as the weight of the emotional load trying to preserve relationships, the assumed risk of infection with COVID-19 through close interactions with the nurse, and finally the inability of the nurse to connect due to lack of energy or having "Zero left to give." One nurse (#2) reported a "sense of depersonalization," while another nurse (#1) described this as a "total disconnect." A third nurse (#15) stated, "You were an outcast even in your own family." Nurses expressed frustration at being unable to turn to their traditional support system with their loved ones during challenges at work because "They don't get it." Nurses also indicated with significant grief responses a sense of guilt in the theme, "My family is suffering because of me." Other nurses contrasted feeling like a

burden in their family because they were unable to give more at work and still keep up with their family roles and responsibilities. These findings support current literature studies in FLWs caring for patients with COVID-19 (Bergman et al., 2021; Gordon et al, 2021; Guttormson et al., 2022; Latvala et al., 2021; Lissoni et al., 2020; Moradi et al., 2021; Villar et al., 2020). Despite challenges, several nurses expressed finding meaningful support in their family through conversation, offers of spiritual support, or serving as a debriefer on nurses' days off.

Colleagues. Nurses reported that the one relationship that clearly benefitted during the care of patients with COVID-19 was with their colleagues. Nurses described bonding, a feeling of camaraderie and support, and the ability to discuss thoughts, feelings, and experiences that individuals outside of the ICU were unable to understand in conversation. Findings are supported by current literature on FLWs and ICU nurses caring for patients with COVID-19 (Bennett et al., 2020; Gordon et al., 2021; Guttormson et al., 2022; Song & McDonald, 2020).

One clear drawback to emotional closeness was the prevalence of empathetic distress in nurses when they witnessed a colleague suffering based on the outcomes of their patients. One nurse (#7) stated, "It hurts my heart." Another nurse (#2) explained how because several nurses on the unit were hurting, the entire ICU staff felt that pain. A third nurse (#16) narrated how when he saw a colleague in pain at work, "That's hard on my soul." Nurses grieved together for the loss of their colleagues when one chose to leave the ICU for a new role, and then expressed difficulty connecting with traveling nurses or new nursing graduates entering the field after those losses. Nurses also expressed feelings of betrayal by their administration and frustration with current

debriefing and counseling for sentinel events which refuse to discuss "the process [of nursing] and jump right to our feelings…we're all still human beings" (Nurse #5). Another nurse (#4) stated, "I almost needed someone to acknowledge the trauma that we're going through." Similar needs have also been documented by other researchers regarding critical care nurses during the COVID-19 pandemic (Guttormson et al., 2022).

Patients. Nurses described one of the effects of caring for patients with COVID-19 as a nursing existential crisis between the head and the heart. Intellectually, nurses identified a predictive pattern in patients which was indicative of poor patient outcomes. One nurse (#20) explained, "I know you are going to end up intubated, sedated, paralyzed, prone, and then you will die."

However, many nurses struggled to retain an emotional connection with these patients despite the impending pain and grief of losing them. One nurse (#18) described witnessing the outcome of a young patient she chose to connect with, "It was harrowing…this was worse than any horror movie…even in the grossest, deepest recesses of a twisted mind." Another nurse (#20) described, "It's a day in and day out pain and death…watching these people get bed sores…have feeding tubes and endotracheal tubes for so long that their tongues wear away. I had a mental breakdown."

Nurses also described COVID-specific barriers to patient care including environmental factors, medical mistrust, media misinformation, limited connection with patients (circumstance or choice), patients not believing in COVID despite being admitted with it, or patients being admitted to the ICU only to refuse any treatment, and ICU nurses grieving the overall rejection of medical advice by the community. Findings are supported by current literature on FLWs and ICU nurses caring for patients with

COVID-19 (Bennett et al., 2020; Gordon et al., 2021, Guttormson et al., 2022; Song & McDonald, 2020; Tosepu et al., 2021).

Relating Findings to Hermeneutics. Each nurse described their process of being in the world with others in terms of their lived space, lived body, lived time, and lived relation (Heidegger, 1971; Peoples, 2021; Van Manen, 2016). Lived space was discussed in the theme of "professional context," under the sub-theme of "environmental factors." Lived body was reflected on by participants in terms of their physical, mental, and emotional existence. One nurse (#2) described in the theme "Keep them alive" their experience in the lived body: "Pain and suffering…. ICU nursing is pain…emotional pain and physical pain." Lived time was also discussed in terms of caring for patients with COVID-19. For example, one nurse (#7) stated, "It honestly felt like the longest year ever because we're still treating COVID. It never went away." Lived relation was one of the main focuses of this study and was discussed extensively in response to the second research question as each nurse struggled to form and maintain meaningful interactions and bonds with other *Dasein* in terms of loved ones, colleagues, and patients (Heidegger, 1971; Peoples, 2021; Van Manen, 2016).

Dasein. Most nurses described, in terms of their *Dasein,* an awakening of sorts. Awakening is demonstrated by the themes of: a) recognizing, b) responding, c) re-defining their core purposes, and d) planning for the future based on their experiences. However, these nurses remain at various stages on the path to authenticity and actualization of their nurse-being based on their levels of self-awareness (Heidegger, 1971; Peoples, 2021; Van Manen, 2016).

Fore-Sight/Fore-Conception. In the theme, "Personal Responses," nurses illustrated how they initially felt, thought, and behaved while beginning their care of patients with COVID-19. Specifically, feelings and thoughts reflecting nurses' frustration, fear, "anxiety of the unknown," grief, and exhaustion were experienced. These feelings, thoughts, and behaviors were challenged and revised throughout each nurse's experience of caring for patients with COVID-19.

Hermeneutic Circle. Each nurse demonstrated learning consistent with the process of the hermeneutic circle (Heidegger, 1971; Van Manen, 2016). Nurses reflected in the theme, "Nursing Was…" how their understanding of their role, attitudes, and practices as a nurse was revised throughout this phenomenon. Revisions to nurse understanding of caring for patients with COVID-19 were based on each nurse's ongoing interpretations of the lived experience throughout the COVID-19 pandemic (Heidegger, 1971; Peoples, 2021; Van Manen, 2016).

<div align="center">Implications for Social Change</div>

Findings of this study support implications for future social and cultural change by providing insights and greater understanding into the lived experience of ICU nurses caring for patients with COVID-19. When applied, such understandings have the potential to contribute to an overall better professional quality of life; enhanced work-life balance; more effective recognition of nursing needs for enhanced coping techniques, improved nurse-patient, nurse-colleague, and nurse-family relationships; and higher nurse retention in the profession of nursing (Garcia & Calvo, 2020; Gordon et al., 2021; Guttormson et al., 2022; Harris et al., 2022; Kester et al., 2021; Kovner et al., 2014; Streubert & Carpenter, 2011; Tosepu et al., 2021). Several nurses commented on

challenges faced by new nursing graduates entering the ICU and their high turnover when they encountered challenges they felt mentally and emotionally unprepared for. Therefore, knowledge from this study could also be applied in an academic setting by nursing educators to help new graduates entering the nursing field be better prepared for the challenges that the nursing profession may hold (Alharbi et al., 2020; Aredbili et al., 2020; Demirci et al., 2020; Johnson & Parreco, 2020; Kovner et al., 2014; Montauk & Kuhl, 2020; Munawar & Choudry, 2021).

<div align="center">Recommendations for Action</div>

Recommendations for action based on the findings of this study are widespread for several different populations. As such, recommendations of actionable items are organized according to the key stakeholder. Implications are discussed below.

Current Nursing Professionals and Leaders

Current nursing professionals and leaders are just two key stakeholders who may benefit from this study by improving their understanding of nurses' lived experiences caring for patients with COVID-19. Findings of this study may be applied in the workplace setting by actively advocating for and incorporating clear lines of access to improved physical, mental, and emotional means of nurse support (Harris et al., 2022; Kester et al., 2021; Reese et al., 2022). Likewise, the social stigma against expressing feelings of grief or trauma relating to patient care needs to be addressed. Nurses have communicated that they found significant support during this time by turning to each other and having meaningful conversations. Such significant support found amongst other nurses indicated that a standardized process of instituting peer support policies may be beneficial in facilitating discussion and seeking out assistance when needed

<div align="center">113</div>

(Guttormson et al., 2022; Harris et al., 2022). Likewise, offering training on tools known to be effective in recognizing and responding to traumatic experiences and grief may benefit both experienced and new nurses (Harris et al., 2022; Kester et al., 2021; Kovner et al., 2014; Mealer & Moss, 2016; Poindexter, 2022; Reese et al., 2022).

Application of these findings in the workplace may also include active facilitation of work-life balance through encouraging healthy work environments and disconnecting from work when at home (Kester et al., 2021; Harris et al., 2022; Mealer & Moss, 2016). One tool that may facilitate such an environment can be found on the AACN (2022) website and is called *The Healthy Work Environment Assessment Tool*. An example of the *Healthy Work Environment Tool* may be found in Appendix G. Such interventions may improve the nursing professional quality of life and nurse retention (Guttormson et al., 2022; Harris et al., 2022; Kester et al., 2021; Kovner et al., 2014; Mealer & Moss, 2016; Poindexter, 2022; Reese et al., 2022).

Future Nursing Professionals and Nurse Educators

Individuals considering entering the field of nursing as well as those responsible for helping them prepare should consider the implications of a high-stress, potentially traumatic environment (Guttormson et al., 2022; Kovner et al., 2014; Poindexter, 2022). Based on the physical, mental, and emotional toll that caring for patients with COVID-19 has exacted on these experienced nurses, it would be wise for these individuals to spend significant time learning and training to prepare for these challenges. Topics may include recognizing signs of trauma or grief in themselves and then responding with proven, effective coping tools and/or asking for help from a trusted mental health provider (Harris et al., 2022; Kester et al., 2022).

114

Dr. Beth Hudnall Stamm (2021) developed and published a free pocket card for nurses entitled *Caring for Yourself in the Face of Difficult Work*. The *Caring for Yourself in the Face of Difficult Work* card offers ten actionable items for nurses as well as tips for transitioning to and from work modes. The *Caring for Yourself in the Face of Difficult Work* tool is just one example of methods to help prepare nurses to mentally and emotionally enter an austere critical care environment directly from nursing school. An example may be found in Appendix H.

Families of Nurses

The state of family relationships appears to hold significant weight in terms of nurses' perceptions of their own emotional well-being (Guttormson et al., 2022). Meaningful support was successfully offered to several nurses in this study throughout their care of patients with COVID-19. Therapeutic listening, offering prayer or words of support, emotional availability, and encouraging the nurse to recognize and respond to effects observed by the family members were all listed by nurses as pivotal in their survival of caring for patients with COVID-19. Although each nurse and each family is unique and will respond differently, it is important to know that it is possible to provide meaningful support despite not being actively involved in the medical field.

Colleagues of Nurses

Benefits of physical, mental, and emotionally present colleagues have been made amply clear throughout this study and are consistent with current research (Guttormson et al., 2022). Support of nursing peers was one of the clear improvements seen throughout the COVID-19 pandemic. Examples of peer support given in interviews included

connecting over home or work life, having meaningful conversations, grieving together, and helping each other out with patient care.

Community Members

Blatantly apparent in these interviews (and other current research) was that the support or rejection of community members held significant effects on the morale and longevity of ICU nurses (Guttormson et al., 2022). Actions of gratitude and support were met with renewed enthusiasm to serve the community, even in the face of sacrificing time with family or risking personal health (Guttormson et al., 2022). Rejection of ICU nurses or acts of violence, verbal abuse, or threats resulted in a massive reduction in nursing desire to stay in the nursing profession or care for patients with COVID-19 (Harris et al., 2022; Kester et al., 2021; Kovner et al., 2014).

Medical Professionals Treating Nurses

Also made clear through these interviews (and other current literature) is that ICU nurses do not readily, or lightly, ask for help when it comes to mental or emotional anguish (Guttormson et al., 2022; Harris et al., 2022). Despite this established hesitancy, the need is ever-present and growing (Guttormson et al., Harris et al., Kester et al., 2021; Mealer & Moss, 2016). As such, it may be beneficial for mental health professionals actively treating ICU nurses to learn about the culture, terminology, and processes that these nurses engage in during their shifts. Educating mental health professionals about this specific population allows the mental health provider to competently engage in a discussion with the ICU nurse or a group debriefing process and incorporate both the intellectual as well as emotional aspects of traumatic experiences (Guttormson et al., 2022; Harris et al., 2022).

Organizations Employing Nurses

The presence (or absence) of effective support was keenly felt and expressed by ICU nurses in these interviews and other current studies while caring for patients with COVID-19 (Guttormson et al., 2022). One nurse expressed that offering words of encouragement from a distance while avoiding the ICU was not effective in helping nurses feel supported by their organization. Additionally, nurses expressed that several organizations communicated plans for safe staffing and patient care but did not deliver adequate resources for these plans. Such findings suggest that advanced crisis planning and preparation of resources would greatly benefit supporting nurses and nurse retention. Finally, nurses expressed that staffing ratios that were deemed necessary during COVID surges did not allow for even the most basic of patient care. Findings suggest that such staffing ratios are inadvisable for future nurse-to-patient ratios, despite any potential short-term financial gains (Guttormson et al., 2022; Kester et al., 2021; Kovner et al., 2014).

Healthcare Policy Makers

Healthcare policymakers must understand the lived experience of the ICU nurse caring for patients with COVID-19 to safely and effectively produce policies that will be realistic and promote nursing retention and safe patient care. Throughout these interviews, nurses have repeatedly expressed that the quality of patient care is directly related to appropriate nurse-to-patient ratios. According to these interviews, during COVID-19 surges or during short-staffing instances, patients were placed in hospital rooms without proper monitoring equipment and experienced sentinel events relating to the inability of a single nurse to be in multiple rooms at once. Sentinel events and

medical errors contribute to poor patient outcomes and increase inpatient length of stay, higher expenses for medical care to rectify errors, and higher rates of nursing turnover (Guttormson et al., 2022; Kakemam et al., 2021; Kester et al., 2021; Kovner et al., 2014; Mealer & Moss, 2016). Therefore, safeguarding appropriate nurse-to-patient ratios has the potential to improve the quality of patient care, reduce healthcare costs, and improve nurse retention (Guttormson et al., 2022; Kakemam et al., 2021; Kester et al., 2021; Kovner et al., 2014; Mealer & Moss, 2016; Rae et al., 2021).

Dissemination of Results

Findings of this study may interest several different populations of nursing professionals, medical leaders, patients and their families, as well as organizations interested in the continued employment of registered nurses. As such, this study may be disseminated through academic journals targeted towards these populations. One example is the AACN's *American Journal of Critical Care,* as well as the academic journal for the *Society of Critical Care Medicine (SCCM),* or the academic journals *Nurse Educator* and *Nursing Education Perspectives.* Additionally, the findings of this study may be presented at local or national conferences for continuing education for promoting best practices and nursing development.

<div align="center">Recommendations for Further Study</div>

Recommendations for future research are manifold. Suggested topics of further study are based on the themes and questions facilitated through this analysis process. Although several different categories are suggested, additional lines of inquiry may be present and this is not an all-inclusive listing.

One such topic would be learning from the theme of Meaningful Support. Family and friends of nurses may wish to offer support during similar challenging circumstances as this phenomenon without having a medical perspective to operate from. Exploring methods of support from family and friends that are effective while caring for patients with COVID-19 could yield significant benefits to the nursing profession and their families (Guttormson et al., 2022).

Along these lines would be a further exploration into the themes of Recognize and Respond. Early recognition by the nurse regarding the effects of caring for difficult patients would be beneficial. Likewise, so would expediting effective responses (or coping) before escalation may prevent a resulting debate between changing jobs or professions (Guttormson et al., 2022; Harris et al., 2022; Mealer & Moss, 2014; Kester et al., 2021; Kovner et al., 2014).

In terms of relationships with colleagues, additional exploration is also warranted. One topic may be an inquiry into the retention of experienced nurses. Another is how to effectively prepare new graduates for the ICU. Such topics have the potential to benefit nurses, patients, and the healthcare system (Guttormson et al., 2022; Harris et al., 2022; Kester et al., 2021; Kovner et al., 2014; Mealer & Moss, 2014; Poindexter, 2022; Reese et al; 2022).

Additional exploration into the processes of educating patients with COVID-19 prior to their admission to the ICU could possibly facilitate increased patient satisfaction as well as the ability to deliver nursing care and medical treatment. Research into addressing patient and family expectations prior to admission could benefit both the healthcare team and the patient population (Guttormson et al., 2022). For example, early

119

education on offered treatments of COVID-19 anticipated duration of stay, and appropriate interactions with healthcare providers (such as standing behavioral contracts, enforced as needed) may revolutionize challenges expressed by the nurses in this study.

Finally, this study has the potential to also direct research into a study of symptoms of nurse trauma and grief responses as well as effective coping tools for these topics. One recommendation by a nurse participant was to "acknowledge the trauma" (Nurse #4). Nurses who have cared for patients with COVID-19 have likely by now experienced previously unprecedented traumatic experiences in their careers (Guttormson et al., 2022). Nurses may be experiencing grief regarding loss of patients and/or colleagues, changing job roles, stress on family/friend relationships (previously their main support system), and/or rejection by their community. Further exploration may also be warranted into establishing methods of obtaining peer support teams where nurses can lead each other in debriefing and early recognition of work-related symptoms with escalation to mental health professionals as needed. Based on the findings of this study, nurses may be more comfortable being vulnerable with someone they believe understands the science as well as the art of nursing (Guttormson et al., 2022; Harris et al., 2022).

<center>Reflection on Researcher's Experience</center>

The researcher identified possible sources of bias in Chapter III prior to beginning data collection or analysis. Sources of bias included the fact that the researcher was employed as an ICU nurse between December 2019 through the completion of this study and has also cared for patients with COVID-19. In terms of hermeneutics, however, having those experiences added to the ability of the researcher to understand the culture

of the ICU nurse. The focus of this study was, however, to fully immerse in the experiences of the participants to gain a new understanding of the lived experience as told by these nurses.

Dasein

The *Dasein* of this researcher may have affected this study as it was known to the participants that this researcher was an ICU nurse. The knowledge of the researcher's involvement in caring for patients with COVID-19 in the ICU may have influenced nurses to express or withhold different types of information. However, having her own lived experiences also added to the ability of this researcher to understand key aspects, phrases, terminology, and insights into critical care situations regarding nursing in the ICU that may have otherwise eluded the researcher.

Fore-sight/Fore-conception

The preconceived knowledge of this researcher included the belief that other nurses had found an answer or prescriptive self-care cure to the trauma and grief of caring for and losing patients with COVID-19. Likewise, this researcher entered this study with the belief that patients with COVID-19, as with all other patients, deserved good quality of care from their nurses.

Hermeneutic Circle

As data collection and analysis took place, this researcher found that as each personal belief or preconceived knowledge was challenged, new questions arose in their place that allowed for further lines of inquiry and exploration. It was clear from these interviews that these nurses had sought to fix or cure their patients with COVID-19 much like this researcher sought to find a fix or cure for the trauma, grief, and pain that ICU

nurses caring for patients with COVID-19 almost uniformly expressed. This understanding was revised innumerable times during data analysis as each nurse expressed their own lived experience, personal challenges, and professional frustrations.

Although there are many possible ways of improving ICU nurses' personal and professional quality of life which have been suggested, this researcher found that one of the most powerful experiences was simply stated in Romans 12:15 of the New International Version of the Holy Bible: "Mourn with those who mourn." Ultimately, the researcher learned through data analysis that the trauma, grief, and pain experienced by these ICU nurses need to be acknowledged, validated, and addressed in order for the nursing profession as a whole to be able to move forward into a COVID-19 post-pandemic phase. Nurse sacrifices cannot be trivialized or ignored if we are to retain these nurses and train more excellent ones to come (Guttormson et al., 2022; Harris et al., 2022).

Concluding Statement

The issues that COVID-19 has brought to the medical profession can only be addressed through achieving a greater understanding of the lived experience of the nurses who have cared for these patients. Documented effects of caring for these patients may then be used to inform appropriate responses to current nursing needs and future quality patient care. Ongoing attention to the experience of those in the nursing profession is needed to ensure the longevity and integrity of the profession itself.

Summary

Valuable insights into the lived experiences of ICU nurses in the United States caring for patients with COVID-19 during the COVID-19 pandemic have been provided

through this study. Findings suggest several research opportunities for further

exploration. Actionable items for key stakeholders based on the firsthand accounts of

experienced frontline ICU nurses. Results of this study, if applied, have the potential to

improve nursing retention, better prepare nursing graduates for critical care, safeguard

quality patient care, and advocate for the profession of nursing (Guttormson et al., 2022;

Harris et al., 2022; Kester et al., 2021; Kovner et al., 2014; Mealer & Moss, 2016;

Poindexter, 2022; Reese et al., 2022).

Office *of*
Research Integrity

THE UNIVERSITY OF
SOUTHERN
MISSISSIPPI.

118 COLLEGE DRIVE #5116 • HATTIESBURG, MS | 601.266.6756 | WWW.USM.EDU/ORI

NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident submission on InfoEd IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: 21-205
PROJECT TITLE: THE COVID-19 EXPERIENCE: AN INTENSIVE CARE NURSING PERSPECTIVE
SCHOOL/PROGRAM Systems Leadership & Health Outcome
RESEARCHERS: PI: Adrianna Watson
Investigators: Watson, Adrianna~Copeland, Debra~
IRB COMMITTEE ACTION: Approved
CATEGORY: Expedited Category
PERIOD OF APPROVAL: 12-Jan-2022 to 11-Jan-2023

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

APPENDIX B – AACN: Participate in Research Studies

AMERICAN ASSOCIATION of CRITICAL-CARE NURSES

Education   Nursing Excellence   Certification   Conferences & Events   Clinical Resources

Store   Cart   Join | Sign In

Nursing Excellence > Participate in Research Studies

Participate in Research Studies

Research is an important element of shaping the future of nursing and clinical practice. Have your voice heard today.

If you are interested in submitting your study for consideration on the webpage, please complete the following

COVID

Participate in a Study About Your Experience Treating Patients With COVID-19

What does it mean to you to care for patients with COVID-19 as an ICU nurse? Share insights on the effects you've noticed in yourself, in your relationships with your friends and loved ones, and/or in your medical team that you associate with caring for patients with COVID-19.

Jan. 18, 2022

An Intensive Care Nursing Perspective

What does it mean to YOU to be an ICU nurse caring for patients with COVID-19?
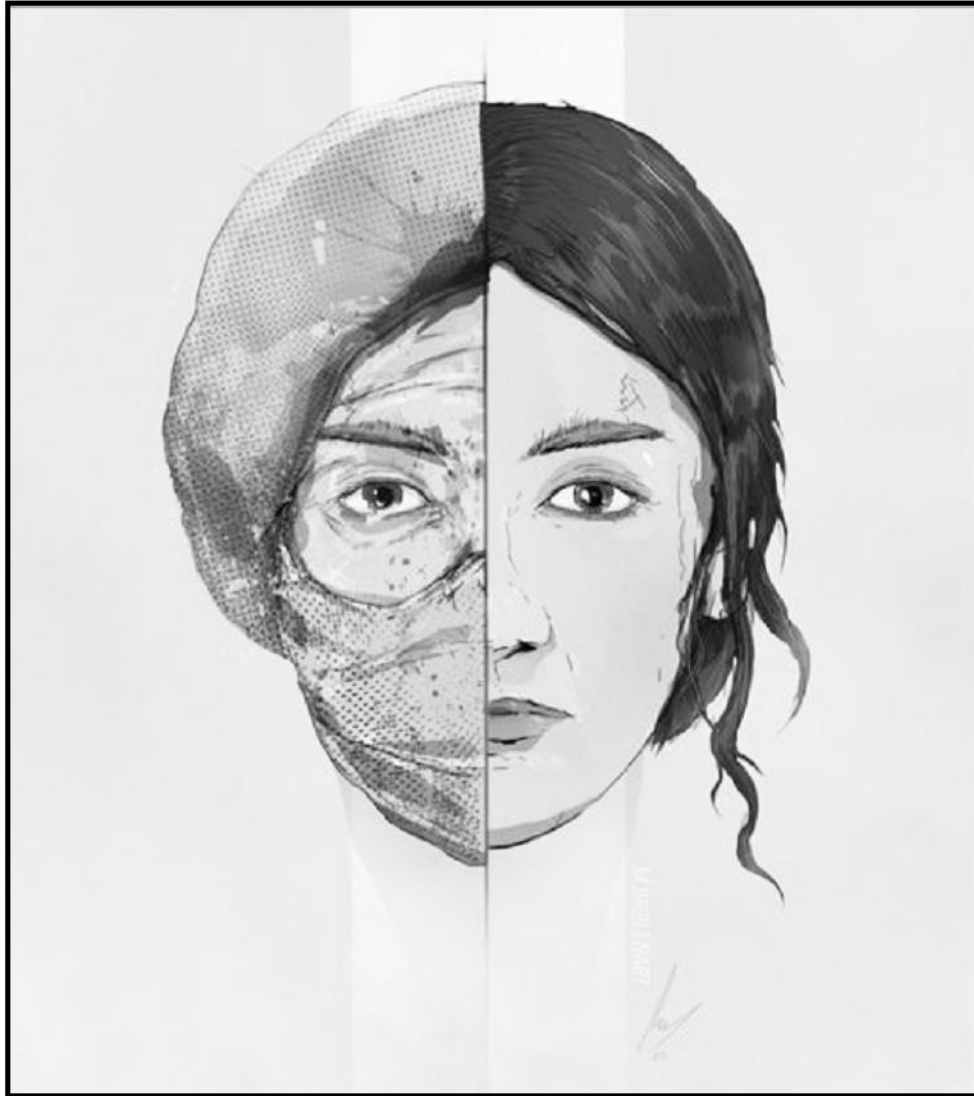
This study will explore the experiences of ICU nurses in the United States caring for patients with COVID-19 using Zoom interviews to generate anonymous reports. Please follow the QR code or contact the primary investigator, Adrianna Watson, MSN, RN, CCRN, TCRN, if you are interested in participating @Adrianna.Watson@usm.edu

Art used with permission from M. J. Hiblen.
Hiblen, M. J. (2020). *Frontline Heroes Art* [digital image]. Eyewear Publishing Ltd.

This study has been approved by USM's IRB, Protocol # 21-205

APPENDIX D – Invitation to Participate

Thanks for Participating in The ICU RN Experience With COVID-19!

The purpose of this study is to explore the lived experience of ICU nurses caring for patients with COVID-19 during the pandemic from 12/2019 through 1/2022. This study will consist of interviewing at least 8 ICU nurses who have willingly cared for patients with COVID-19.

Interviews will be recorded and transcribed using Zoom or Microsoft Teams to allow for social distancing. However, no identifying information from either the nurse being interviewed or the organization they work for will be used in this study.

The potential benefits of this study include a greater widespread understanding of the experiences and effects that caring for patients with COVID-19 has on nurses, with potential implications that it may improve future nursing care and professional quality of life.

The potential risks of participating in this study include psychological distress experienced while reflecting on the experience of caring for patients with COVID-19. No identifying information will be reported in this study. Participation is voluntary; no incentives are offered for completion of these interviews. Participants can discontinue participation at any time without penalty or loss of benefits. The National Alliance on Mental Illness (NAMI) has a Monday through Friday hotline which can be contacted at 1(800) 950- 6264 and counselors are also available via text and email on their website at www.nami.org.

Recordings of interviews will be kept on a passcode encrypted USB device for use in this study by the researcher alone. Participants will be assigned a number, and no organizational or locally identifying geographic information will be reported in data findings. State information may be used if it can be reasonably expected to add to the body of this study without identifying a participant or organization.

Participants may submit journal entries, a picture, poem, or a social media post if they feel it adds to supporting their experience by emailing the primary investigator at this secure email address: Adrianna.Watson@usm.edu

1. Read through this survey and answer the questions to the best of your abilities.

2. You will receive a thank you email following completion of this survey.

3. Within 48 hrs, the researcher will contact you to schedule a short interview via Zoom or Microsoft Teams.

APPENDIX E – Participants Information Letter

January 16, 2022

Dear Sir or Madam,

I am a 3rd year PhD student at the University of Southern Mississippi and currently conducting a dissertation research study entitled: "THE COVID-19 EXPERIENCE: AN INTENSIVE CARE NURSING PERSPECTIVE."

This study will seek to explore the lived experience of ICU nurses as they cared for patients with COVID-19 between December 2019 and now. Particular attention is given to any perceived effects on nurse relationships with their patients, colleagues, friends and family, or changing beliefs about their own role as an ICU nurse.

In connection with this, I would like to request your participation in a brief demographics survey via Qualtrics and an approximately 15-minute, semi-structured interview using Zoom or Microsoft Teams. All information will be securely stored and anonymized to protect participant and organizational identity. This is an independent, academic study and is not affiliated with any organization. Participation is voluntary, and there are no incentives for completion of this interview.

Participants may discontinue participation at any time without loss of benefits. The National Alliance on Mental Illness (NAMI) has a Monday through Friday hotline which can be contacted at 1(800) 950- 6264 and counselors are also available via text and email on their website at www.nami.org. This study has been approved by USM's IRB, Protocol # 21-205. If you have any questions, feel free to email me at Adrianna.Watson@usm.edu.

Thank you for your time and service,

Adrianna Watson

PARTICIPANT	STATE	GENDER	AGE	ETHNICITY	EDUCATION	MARITAL STATUS	CHILDREN	EMPLOYMENT	SHIFT	YEARS AS RN	YEARS IN CRITICAL CARE
P1	OR	F	25-34	Caucasian	BSN	M	2	Prn	Day	4-9	4-9
P2	OR	F	35-44	Caucasian	BSN	M	1	Full	Day	10-14	4-9
P3	VA	F	45-53	African-American, Asian	BSN	S	0	Full	Day	15+	2-3
P4	UT	F	35-44	Caucasian	BSN	M	2	Full	Day	10-14	4-9
P5	UT	F	35-44	Caucasian	BSN	M	2	Full	Day	10-14	4-9
P6	MD	F	35-44	Caucasian	MSN	M	3	Full	Noc	10-14	4-9
P7	UT	F	25-34	Caucasian	BSN	M	3	Part	50/50	4-9	2-3
P8	UT	F	45-54	Caucasian	BSN	M	1	Full	Noc	15+	10-15
P9	MS	F	25-34	Caucasian	BSN	S	0	Full	Noc	2-3	2-3
P10	UT	F	45-54	American Indian	MSN	M	0	Full	Noc	15+	10-15
P11	UT	F	35-44	Caucasian	BSN	M	3	Full	Noc	15+	10-15
P12	UT	F	45-54	Caucasian	BSN	M	1	Full	Day	15+	4-9
P13	UT	F	35-44	Caucasian	BSN	M	1	Full	Day	4-9	4-9
P14	TX, WI	F	45-34	Caucasian	BSN	S	0	Full	Day	2-3	2-3
P15	UT	M	35-44	Caucasian	BSN	M	8	Full	Day	15+	10-15
P16	UT	M	35-44	Caucasian	BSN	M	2	Full	Noc	4-9	4-9
P17	UT	M	25-34	Caucasian	BSN	D	4	Full	Noc	4-9	2-3
P18	PA	F	45-54	Caucasian	MSN	M	1	Full	Noc	15+	4-9
P19	UT	M	35-44	Caucasian	MSN	M	4	Full	Day	15+	10-15
P20	UT	F	45-34	Caucasian	BSN	M	2	Full	Day	15+	10-15

CARING FOR YOURSELF IN THE FACE OF DIFFICULT WORK

Our work can be overwhelming. Our challenge is to maintain our resilience so that we can keep doing the work with care, energy, and compassion.

10 things to do for each day

1. Get enough sleep.
2. Get enough to eat.
3. Do some light exercise.
4. Vary the work that you do.
5. Do something pleasurable.

6. Focus on what you did well.
7. Learn from your mistakes.
8. Share a private joke.
9. Pray, meditate or relax.
10. Support a colleague.

For more Information see your supervisor and visit www.psychosocial.org or www.proqol.org

Beth Hudnall Stamm, Ph.D., *ProQOL.org and Idaho State University*
Craig Higson-Smith, M.A., *South African Institute of Traumatic Stress*
Amy C. Hudnall, M.A., *ProQOL.org and Appalachian State University*
Henry E. Stamm, Ph.D., *ProQOL.org*

SWITCHING ON AND OFF

It is your empathy for others helps you do this work. It is vital to take good care of your thoughts and feelings by monitoring how you use them. Resilient workers know how to turn their feelings off when they go on duty, but on again when they go off duty. This is not denial; it is a coping strategy. It is a way they get maximum protection while working (switched off) and maximum support while resting (switched on).

How to become better at switching on and off

1. Switching is a conscious process. Talk to yourself as you switch.

2. Use images that make you feel safe and protected (switch off) or connected and cared for (switch on) to help you switch.

3. Find rituals that help you switch as you start and stop work.

4. Breathe slowly and deeply to calm yourself when starting a tough job.

REFERENCES

Alhrabi, J., Jackson, D., & Usher, K. (2020). The potential for COVID-19 to contribute to compassion fatigue in critical care nurses. *Journal of Clinical Nursing, 29.* doi:10.1111/jocn.15314

Ardbili, M. E., Naserbakht, M., Bernstein, C., Alazmani-Noodeh, F., Hakimi, H., & Ranjbar, H. (2020). Healthcare providers experience of working during the COVID-19 pandemic: A qualitative study. *American Journal of Infection Control, 10.* https://doi.org/10.1016/j.ajic.2020.10.001

American Association of Critical Care Nurses (AACN). (2016). *AACN Standards for Establishing and Sustaining Healthy Work Environments.* (3rd ed.). American Association of Critical Care Nurses. https://www.aacn.org/~/media/aacn-website/nursing-excellence/standards/hwestandards.pdf

American Association of Critical Care Nurses (AACN). (2019). *AACN Scope and Standards for Progressive and Critical Care Nursing Practice.* American Association of Critical Care Nurses. https://www.aacn.org/~/media/aacn-website/nursing-excellence/standards/aacn-scope-and-standards-for-progressive-and-critical-care-nursing-practice.pdf

American Association of Critical Nurses (AACN). (2022) *Healthy Work Environments.* https://www.aacn.org/nursing-excellence/healthy-work-environments

American Nurses Association (ANA). (2021). *Pulse on the Nation's Nurses.*

      https://www.nursingworld.org/practice-policy/work-environment/health-

      safety/disaster-preparedness/coronavirus/what-you-need-to-know/mental-health-

      and-wellbeing-survey

American Psychological Association (APA). (2020). *Keeping your distance to stay safe.*

      https://www.apa.org/practice/programs/dmhi/research-information/social-

      distancing

American Thoracic Society (ATS). (2016). *What is ECMO?*

      https://www.thoracic.org/patients/patient-resources/resources/what-is-ecmo.pdf

Antonijevic, J., Binic, I., Zikic, O., Manojilovic, S., Tosic-Golubovic, S., & Popovic, N.

      (2020). Mental health of medical personnel during the COVID-19 pandemic.

      Brain and Behavior, 10. https://doi.org/10.1002/brb3.1881

Beals, F., Kidman, J., & Funaki, H. (2019). Insider and Outsider Research: Negotiating

      Self at the Edge of the Emic/Etic Divide. *Qualitative Inquiry, 26*(6).

      https://doi.org/10.1177/1077800419843950

Benner, P. (1994). *Interpretive Phenomenology: Embodiment, Caring, and Ethics in*

      Health and Illness. SAGE.

Benner, P. (1982). From novice to expert. *The American Journal of Nursing, 82*(3).

      https://doi.org/10.2307/3462928

Bennett, P., Noble, S., Johnston, S., Jones, D., & Hunter, R. (2020). COVID-19

      confessions: a qualitative exploration of healthcare workers experiences working

      with COVID-19. *British Medical Journal, 10.* http://dx.doi.org/10.1136/bmjopen-

      2020-043949

Bergman, L., Falk, A., Wolf, A., & Larsson, I. (2021). Registered nurses' experiences of

    working in the intensive care unit during the COVID-19 pandemic. *Nursing in*

    Critical Care, 10. https://pubmed.ncbi.nlm.nih.gov/33973304/

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). *Quality Health*

    Research, 26(13). https://doi.org/10.1177/1049732316654870

Biswas, S., Thakur, V., Kaur, P., Khan, A., Kulshrestha, S., & Kumar, P. (2021). Blood

    clots in COVID-19 patients: Simplifying the curious mystery. *Medical*

    Hypotheses, 146. https://www.scribd.com/document/520112811/Blood-clots-in-

    COVID-19-patients-Simplifying-the-curious-mystery

Bontekoe, R. (1996). *Dimensions of the Hermeneutic Circle.* Humanities Press.

Butts, J. B., & Rich, K. L. (2018). *Philosophies and theories for advanced nursing*

    practice. (3rd ed.). Jones & Bartlett Learning.

Carter, C., & Notter, J. (2020). COVID-19 disease: a critical care perspective.

    Clinics in integrated care.

    https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7261655/

Centers for Disease Control and Prevention (CDC). (2016). *Pandemic basics.*

    https://www.cdc.gov/flu/pandemic-resources/basics/index.html

Centers for Disease Control and Prevention (CDC). (2020). *Studying the disease.*

    https://www.cdc.gov/coronavirus/2019-ncov/science/about-

    epidemiology/studying-the-disease.html

Centers for Disease Control and Prevention (CDC). (2021a). *Treatments your healthcare*

    provider might recommend if you are sick.

https://www.cdc.gov/coronavirus/2019-ncov/your-health/treatments-for-severe-illness.html

Centers for Disease Control and Prevention (CDC). (2021b). *Trends in number of covid-19 cases and deaths in the U.S. reported to CDC.* https://covid.cdc.gov/covid-data-tracker/#trends_dailycases

Centers for Disease Control and Prevention (CDC). (2021c). *United States COVID-19 Cases, Deaths, and Laboratory Testing.* https://covid.cdc.gov/covid-data-tracker/#cases_totaldeaths

Centers for Disease Control and Prevention (CDC). (2021d). *Monitoring Variant Proportions.* https://covid.cdc.gov/covid-data-tracker/#about-data-heading

Coffey, A., & Atkinson, P. (1996). *Making Sense of Qualitative Data.* SAGE.

Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* (5th ed.). SAGE.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry & Research Design.* (4th ed.). SAGE.

Cucinotta, D., & Vanelli, M. (2020). WHO Declares COVID-19 a Pandemic? *Acta Bio Medica, 91*(1). https://pubmed.ncbi.nlm.nih.gov/32191675/

Demirci, A. D., Oruc, M., & Kabukcuoglu, K. (2020). 'It was difficult, but our struggle to touch lives gave us strength': The experience of nurses working on COVID-19 wards. *Journal of Clinical Nursing, 30*. doi: 10.1111/jocn.15602

Gadamer, H. (1978). *Truth and method.* (2nd ed.). Continuum. https://www.forum-transregionale-

studien.de/fileadmin/pdf/zukunftsphilologie/lecture-cum-seminar/2014-01-

16_Gadamer_Truth_and_Method_____Part_III_Chpt_1.pdf

Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the

framework method for the analysis of qualitative data in multi-disciplinary health

research. *BMC Medical Research Methodology, 18*(13).

https://pubmed.ncbi.nlm.nih.gov/24047204/

Galehdar, N., Toulabi, T., Kamran, A., & Heydari, H. (2020). Exploring nurses'

perception of taking care of patients with coronavirus disease (COVID-19): A

qualitative study. *Nursing Open, 8.* doi: 10.1002/nop2.616

Gao, X., Jiang, L., Hu, Y., Li, L., Hou, L. (2020). Nurses' experiences regarding shift

patterns in isolation wards during the COVID-19 pandemic in China: A

qualitative study. *Journal of Clinical Nursing, 29*. doi:10.1111/jocn.15464

Garcia, G. M., & Calvo, J. C. A. (2020). The threat of COVID-19 and its influence on

nursing staff burnout. *Journal of Advanced Nursing, 77*, 832-844.

doi:10.1111/jan.14642

Gershengorn, H.B., Hu, Y., Chen, J., Hsieh, S.J., Dong, J., Gong, M.N., & Chan, C.W.

(2021). The impact of High Flow Nasal Cannula Use on Patient Mortality and the

Availability of Mechanical Ventilators in COVID-19. *Annals of the American

Thoracic Society, 18*(4). https://doi.org/10.1513/AnnalsATS.202007-803OC

Gordon, J. M., Magbee, T., & Yoder, L. H. (2021). The experiences of critical care

nurses caring for patients with COVID-19 during the 2020 pandemic: A

qualitative study. *Applied Nursing Research, 59.*

https://doi.org/10.1016/j.j.apnr.2021.151418

Gray, J. R., Grove, S. K., & Sutherland, S. (2017). *The Practice of Nursing Research.* (8th ed.). Elsevier.

Guttormson, J. L., Calkins, K., McAndrew, N., Fitzgerald, J., Losurdo, H., & Loonsfoot, D. (2022). Critical care nurses' experiences during the covid-19 pandemic: A U.S. national survey. *American Journal of Critical Care, 31*(2), 96-103. https://doi.org/10.4037/ajcc2022312

Harris, P., Hume, L., Fox, D., Hamel, C., & Flaherty, M. (2022). Pathway to excellence: A framework to combat PTSD. *American Nurse, 17*(1), 28-30. https://www.myamericannurse.com/wp-content/uploads/2021/12/an1-Magnet-Stories-Jan22-1221-2.pdf

Heidegger, M. (1971). *Building, Dwelling, Thinking.* In A. Hofsdater (Ed.), Poetry, Language and Thought (pp. 143-162). Harper & Row.

Heidegger, M. (1927). *On Time and Being*. Harper & Row. https://dlcl.stanford.edu/sites/default/files/files_upload/Heidegger%20-%20Time%20and%20Being.pdf

Hoernke, K., Djellouli, N., Andrews, L., Lewis-Jackson, S., Manby, L., Martin, S., Vanderslott, S., Vindrola-Padros, C. (2021). Frontline healthcare workers' experiences with personal protective equipment during the COVID-19 pandemic in the UK: a rapid qualitative appraisal. *BMJ Open, 11,* 1-13. https://pubmed.ncbi.nlm.nih.gov/33472794/

Horrigan-Kelly, M., Millar, M., & Dowling, M. (2016). Understanding the Key Tenets of Heidegger's Philosophy for Interpretive Phenomenological Research. *International Journal of Qualitative Methods.* doi:10.1177/1609406916680634

International Council of Nurses. (2021a). *Nurses a voice to lead: a vision for future healthcare.* https://2021.icnvoicetolead.com/wp-content/uploads/2021/05/ICN-Toolkit_2021_ENG_Final.pdf

International Council of Nurses. (2021b). *International Council of Nurses COVID-19 Update.* https://www.icn.ch/sites/default/files/inline-files/ICN%20COVID19%20update%20report%20FINAL.pdf

Jasper, D. (2004). *A Short Introduction to Hermeneutics.* John Knox Press.

Johnson, D. L., Parreco, J. P. (2020). The critical bedside role in identifying and treating lung injury during the COVID-19 pandemic. *Nursing Open, 7*, 1272-1273. doi:10.1002/nop2.525

Kakemam, E., Chegini, Z., Rouhi, A., Ahmadi, F., & Majidi, S. (2021). Burnout and its relationship to self-reported quality of patient care and adverse events during COVID-19: A cross sectional online survey among nurses. *Journal of Nursing Management, 29*(7). https://doi.org/10.1111/jonm.13359

Kester, K., Pena, H., Shuford, C., Hansen, C., Stokes, J, Brooks, K., Bolton, T., Ornell, A., Parker, P., Febre, J., Andrews, K., Flynn, G., Ruiz, R., Evans, T., Kettle, M., Minter, J., & Granger, B. (2021). Implementing AACN's Healthy Work Environment Framework in an Intensive Care Unit. *American Journal of Critical Care, 30*(6), 426-433. https://europepmc.org/article/med/34719717

Kovner, C. T., Brewer, C. S., Father, F., & Jun, J. (2014). What Does Nurse Turnover Rate Mean and What Is the Rate? *Policy, Politics, & Nursing Practice, 15* (3), 64-71. https://pubmed.ncbi.nlm.nih.gov/25156041/

Latvala, S., Masterman, R., Rasul, R., & Dropkin, J. (2021). Effect of Safe Patient

    Handling and Mobility Coordinators on Work-Related Musculoskeletal Injuries,

    Proximal Mental Illness, and Patient Related Safety Events in New York State

    Intensive Care Unit Registered nurses in the Age of Covid-19: The Methods.

    International Journal of Safe Patient Handling & Mobility (SPHM), 11(1), 16-33.

    https://pubmed.ncbi.nlm.nih.gov/25184472/

Laudanski, K., Moon, K., Singh, A., Chen, Y., Restrepo, M. (2021). The characterization

    of the Toll of Caring for Coronavirus Disease 2019 on ICU Nursing Staff. *Critical*

    Care Explorations, 2;3(4). https://pubmed.ncbi.nlm.nih.gov/33834170/

Li, J., Li., P., Chen, J., Ruan, L., Zeng, Q., & Gong, Y. (2020). Intention to response,

    emergency preparedness and intention to leave among nurses during COVID-19.

    Nursing Open, 7, 1867-1875. doi: 10.1002/nop2.576

Lieblich, A., Tuval-Mashiach, R., & Zilber, T. (1998). *Narrative Research.* SAGE.

Lissoni, B., Del Negro, S., Brioschi, P., Casella, G., Fontana, I., Bruni, C., & Lamiani, G.

    (2020). Promoting resilience in the acute phase of the covid-19 pandemic:

    psychological interventions for intensive care unit (ICU) clinicians and family

    members. (2020). *Psychological Trauma : Theory, Research, Practice, and*

    Policy, 12(1), 105-107. https://pubmed.ncbi.nlm.nih.gov/32551763/

Liu, Q., Luo, D., Haase, J. E., Guo, Q., Wang, X. Q., Liu, S., Xia, L., Liu, Z., Yang, J., &

    Yang, B. X. (2020). The experiences of health-care providers during the COVID-

    19 crisis in China: A qualitative study. *The Lancet Global Health, 8*(6), e790-

    e798. https://doi.org/10.1016/S2214-109X(20)30204-7

Lorente, L., Vera, M., & Peiro, T. (2020). Nurses' stressors and psychological distress during the COVID-19 pandemic: The mediating role of coping and resilience. *Journal of Advanced Nursing, 77*, 1335-1344. https://pubmed.ncbi.nlm.nih.gov/33210768/

Master, A. N., Su, X., Zhang, S., Guan, W., & Li, J. (2020). Psychological impact of COVID-19 outbreak on frontline nurses: A cross-sectional survey study. *Journal of Clinical Nursing.* doi:10.1111/jocn.15454

Mealer, M., & Moss, M. (2016). Moral distress in ICU nurses. *Intensive Care Medicine, 42.* https://pubmed.ncbi.nlm.nih.gov/27480316/

Montauk, T. R., & Kuhl, E. A. (2020). COVID-Related Family Separation and Trauma in the Intensive Care Unit. *Psychological Trauma: Theory, Research, Practice, and Policy, 12*(1). http://dx.doi.org/10.1037/tra0000839

Moradi, Y., Baghaei, R., Hosseingholipour, K., & Mollazadeh, F. (2021). Challenges experienced by ICU nurses throughout the provision of care for COVID-19 patients: A qualitative study. *Journal of Nursing Management, 29*(5), 1159-1168. https://doi.org/10.1111/jonm.13254

Munawar, K., & Choudhry, F. R. (2021). Exploring stress coping strategies of frontline emergency health workers dealing COVID-19 in Pakistan: A qualitative inquiry. *American Journal of Infection Control, 49.* https://doi.org/10.1016/j.ajic.2020.06.214

Munhall, P. L. (2012). *Nursing Research: A Qualitative Perspective.* (5th ed.). Jones & Bartlett Learning.

Munro, C. (2010). The "Lady with The Lamp" illuminates critical care today. *American Journal of Critical Care, 19*(4). https://doi.org/10.4037/ajcc2010228

National Institutes of Health. (2021). *COVID-19 Treatment Guidelines.* https://www.covid19treatmentguidelines.nih.gov/about-the-guidelines/introduction/

Nightingale, F. (1912). *Notes on Nursing: What It Is, and What It Is Not.* D Appleton and Company. https://digital.library.upenn.edu/women/nightingale/nursing/nursing.html

Packer, M. J., & Addison, R. B. (1989). *Entering the circle: Hermeneutic Investigation in psychology.* State University of New York Press.

Palmer, R. E. (1969). *Hermeneutics.* Northwestern University Press.

Paterson, M., & Higgs, J. (2005). Using Hermeneutics as a qualitative research approach in professional practice. *The Qualitative Report, 10*(2). https://nsuworks.nova.edu/tqr/vol10/iss2/9

Peoples, K. (2021). *How to write a phenomenological dissertation: A step-by-step guide.* SAGE.

Poindexter, K. (2022). Resilience, Well-being, and preparation for the profession: A moral imperative. *Nurse Education Perspectives, 43*(1), 1-2. https://pubmed.ncbi.nlm.nih.gov/34939769/

Polit, D. F., & Beck, C. T. (2004). *Nursing research: Principles and methods.* (7ᵗʰ ed.). Lippincott, Williams, & Wilkins.

141

Rae, P. J., Pearce, S., Greaves, P. J., Dall'Ora, C., Griffiths, P., Endacott, R. (2021). *Intensive and Critical Care Nursing, 67.* https://doi.org/10.1016/j.iccn.2021.103110

Reese, S. M., Johnson, J., Edwards, J., Oliveti, M., & Buszkiewic, S. (2022). Innovative Partnership between intensive care unit nurses and therapists to care for patients with COVID-19. *Critical Care Nurse, 42*(1), 44-55. https://pubmed.ncbi.nlm.nih.gov/34382078/

Roberts, N. J., McAloney-Kocaman, K., Lippiet, K., Ray, E., Welch, L., & Kelly, C. (2021). Levels of resilience, anxiety, and depression in nurses working in respiratory clinical areas during the COVID pandemic. *Respiratory Medicine, 176.* https://doi.org/10.1016/j.med.2020.106219

Ruiz-Fernandez, M. D., Ramos-Pichardo, J. D., Ibanez-Masero, O., Cabrera-Troya, J., Carmona-Rega, M. I., & Ortega-Galan, A. M. (2020). Compassion fatigue, burnout, compassion satisfaction and perceived stress in healthcare professionals during the COVID-19 health crisis in Spain. *Journal of Clinical Nursing, 29*, 4321-4330. doi: 10.1111/jocn.15469

Sharma, B., & Jiwan, T. (2015). Self-compassion: basis of quality nursing care. *Asian Journal Nursing Education and Research, 5*(2), 279–282. https://self-compassion.org/wp-content/uploads/2016/06/Sharma-Jiwan_2015.pdf

Song, J., & McDonald, C. (2020). Experiences of New Zealand registered nurses of Chinese ethnicity during the COVID-19 pandemic. *Journal of Clinical Nursing, 30*, 757-764. https://pubmed.ncbi.nlm.nih.gov/33348470/

Streubert, H. J., & Carpenter, D. R. (2011). *Qualitative research in nursing.* (5[th]ed.).

>Wolters Kluwer Health.

Stamm, B. H. (2020). *General helper card.* The Center for Victims of Torture.

>https://proqol.org/helper-pocket-card

Tosepu, R., Gunawan, J., Effendy, D. S., Rustam, M., Muchtar, F., Sakka, A., &

>Indriastuti, D. (2021). Experience of healthcare workers in combatting COVID-

>19 in Indonesia: A descriptive qualitative study. *Belitung Nursing Journal,*

>*7*(1), 37-42. https://doi.org/10.33546/bnj.1251

U.S. Food and Drug Administration (FDA). (2021). *FDA approves first COVID-19*

>*Vaccine.* https://www.fda.gov/news-events/press-announcements/fda-approves-

>first-covid-19-vaccine

Van Manen, M. (2016). *Researching Lived Experience.* (2nd ed.). Routledge.

Villar, R. C., Nashwan, A. J., Mathew, R. G., Mohamed, A. S., Munirathinam, S.,

>Abujaber, A. A., Al-Jabry, M. M., & Shraim, M. (2020). The lived experiences of

>frontline nurses during the coronavirus disease 2019 (COVID-19) pandemic in

>Qatar: A qualitative study. *Nursing Open,* 8(6).

>https://pubmed.ncbi.nlm.nih.gov/33949145/

World Health Organization (WHO). (2021a). *WHO Coronavirus (COVID-19)*

>*Dashboard.* https://covid19.who.int/

World Health Organization (WHO). (2021b). *COVID-19 vaccines.*

>https://www.who.int/emergencies/diseases/novel-coronavirus-2019/covid-19-

>vaccines

Xiao, H., Zhang, Y., Kong, D., Li, S., & Yang, N. (2020). The effects of social support on sleep quality of medical staff treating patients with coronavirus disease 2019 (COVID-19) in January and February 2020 in China. *Medical Science Monitor: International Medical Journal of Experimental and Clinical Research, 26,* e923549-9235