Impact of COVID-19 on Intensive Care Unit Nurse Duty of Care and Professional Roles: A Qualitative Content Analysis

SAGE Open Nursing
Volume 8: 1–9
© The Author(s) 2022
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/23779608221113539
journals.sagepub.com/home/son

\$SAGE

Jacqueline Christianson, MSN, RN, FNP-C¹, Jill Guttormson, PhD, RN¹, Natalie Susan McAndrew, PhD, RN, ACNS-BC, CCRN-K^{2,3} and Kelly Calkins, PhD, RN¹

Abstract

Background: Nurse duty of care, the balance between nursing occupational obligations to provide care, the personal costs for providing such care, and the reward for providing care, has been significantly altered by the COVID-19 pandemic. ICU nurses are increasingly burdened with higher personal costs to fulfill their jobs, but little additional reward for continuing to provide care.

Objectives: The purpose of this study was to examine the impact of the COVID-19 pandemic on the duty of care balance among ICU nurses who manage COVID-19 patients.

Design: This was a descriptive qualitative study using semi-structured interviews.

Methods: Nurses were recruited for a parent study on ICU nursing during COVID-19; this is a secondary analysis of the interviews that took place during the parent study. Content analysis was utilized to identify themes from interview transcripts. **Results:** Thirteen nurses participated in interviews. Nurses reported betrayal at perceived breeches in their duty of care agreement by their employers, the general public, and national health authorities. They described alterations to previous standards of care such as significantly increased workloads, worsening understaffing, and changes to patient care expectations that were implemented for reasons other than betterment of patient care. Nurses reported they felt a moral obligation to provide care, however they experienced disempowerment and burnout that affected them both in and out of the workplace.

Conclusion: The COVID-19 pandemic has affected several aspects of the duty of care balance, resulting in a duty of care balance that is inequitable to nurses. Imbalance in the effort, risks, and rewards for nursing professionals may contribute to nurse burnout.

Relevance to Clinical Practice: This research highlights the need for healthcare administrators to consider resource allocation, nurse appreciation, and commensurate compensation for professional nurses.

Keywords

COVID-19 pandemic, critical care nursing, professional role, altruism

Received 9 March 2022; Revised received 20 June 2022; accepted 22 June 2022

Background

The COVID-19 pandemic caused a significant shift in the occupational stressors and risks associated with critical care nursing. Frontline healthcare workers and their household members were found to be significantly more likely to suffer from severe COVID-19 than nonessential workers (Mutambudzi et al., 2021; Shah et al., 2020). Nurses had a diminished ability to mitigate occupational risks due to

¹College of Nursing, Marquette University, Milwaukee, WI, USA

²College of Nursing, University of Wisconsin – Milwaukee, Milwaukee, WI, USA

³Froedtert & the Medical College of Wisconsin Froedtert Hospital, Milwaukee. WI. USA

Corresponding Author:

Jacqueline Christianson, College of Nursing, Marquette University, PO Box 1881, Milwaukee, WI, USA.

Email: jacqueline.christianson@marquette.edu

shortages of personal protective equipment (PPE) (Cohen & van der Meulen Rogers, 2020). Many nurses felt there was little support or managerial response for the increased risk and stress posed by their work environment (Foli et al., 2021). Consequently, nurses caring for COVID-19 patients experience increased psychological distress, fear, and greater intention to leave their jobs (Labrague & de los Santos, 2020). Burnout, a syndrome of exhaustion, depersonalization, and diminished sense of personal accomplishment (Maslach & Jackson, 1981), is a pervasive problem in nursing which has worsened during the COVID-19 pandemic (Labrague & de los Santos, 2020; Kumar et al., 2021). Burnout is linked to long shift durations, high workloads, and high levels of stress (Borhani et al., 2014; Dall'Ora et al., 2015). Nurse burnout is associated with increased intention to leave the profession and increased patient mortality (Aiken et al., 2002).

Nurses have a professional and legal obligation to provide care for patients (American Nurses Association, 2015; Tingle, 2009). Duty of care is the concept that individuals who provide healthcare are obligated to prioritize the needs of the people for whom they are caring (Sokol, 2006; Terry et al., 2017). While there is not consensus on a definition, most scholars agree that duty of care represents a negotiation between society and healthcare workers (Cox, 2020; Tomlinson, 2008). In the context of professional nursing, duty of care is a balance in which the professional's effort and personal risks are compensated with a reward structure. The nurse's obligations with regards to duty of care are not limitless; duty of care is situational. For example, nurses are not typically expected to put themselves in harm's way for their patients (American Nurses Association, 2015). Changes in the work environment and the effort-riskreward balance therefore alter the nurse's duty of care. Ambiguity around the limitations of a nurse's duty of care can lead to a disconnect in mutual expectations between nurses and the patients for whom they are charged to care, particularly in the setting of changes in the work environment (Reid, 2005). The COVID-19 pandemic caused a sudden alteration in the risk profile of critical care nursing; consequently, the balance between duty of care and nurse recompense has been disrupted. The COVID-19 pandemic has exacerbated staffing shortages, escalated patient acuity levels, and decreased access to reprieves from work which also places nurses working with COVID-19 patients at increased risk for burnout (Aiken et al., 2002; Goldman et al., 2018; Kumar et al., 2021).

Review of Literature

Altruism, the act of behaving for the benefit of others, is commonly cited as a driving force that impels nurses toward their work (Van der Wath & van Wyk, 2019). Prior research has found that altruism had a strong impact upon job satisfaction, and further hypothesized that nurses will tolerate a work environment with low pay or high stress because the work

fulfills the nurse's sense of altruism (Dotson et al., 2014). Altruistic ideals are associated with higher levels of personal accomplishment, but also exhaustion, indicating that altruism can be a protective factor (promote personal accomplishment) but also risk factor (increasing exhaustion) in the development of burnout (Altun, 2002). Reduced altruism is associated with higher levels of burnout in nurses, however the directionality of this relationship is unclear (Burks et al., 2012). If altruism is indeed one of the benefits of nursing work, reduced ability to behave altruistically can be understood as a functional reduction in compensation, further upsetting the effort–reward balance inherent in a duty of care arrangement.

Perceived moral obligation and altruistic behavior can fuel the duty of care imbalance. For example, poor access to lunch breaks or agreeing to overtime shifts could be understood as a nurse's attempt to fill a patient care need over their own needs. A professional obligation toward patient care above all else makes nurses particularly vulnerable to burnout because it places pressure upon nurses to accept situations in which the duty of care balance is unfavorable. While the American Nursing Association Code of Ethics for Nurses with Interpretive Statements (2015) provision 5 states, "The nurse owes the same duties to self as to others, to promote health and safety, preserve wholeness of character and integrity..." (p. 19), nurses may be confronted with the impossible task of caring for themselves while caring for others.

The workplace and social challenges created by the COVID-19 pandemic have had a broad impact upon the nursing profession and have disturbed the balance between professional effort, risk, and reward. The effect of this environmental change upon ICU nurses' perspectives on duty of care has not been studied, however understanding changes in the duty of care balance is essential because duty of care is a central commitment between professional nurses and the public. The purpose of this study was to examine the impact of the COVID-19 pandemic on the duty of care balance among ICU nurses who manage COVID-19 patients.

Methods

Study Design, Inclusion Criteria, and Sample

This paper is a secondary analysis of semi-structured interview data obtained from a parent study on ICU nurses who worked with COVID patients during the pandemic. The parent study recruited a national sample (N=488) of nurses who participated in an online survey; all survey participants were given the opportunity to self-select to participate in one-on-one interviews to discuss their experiences working in an ICU caring for COVID-19 patients. Thirteen participants completed the interview focused on overall experience of COVID as part of the primary study; this secondary analysis utilized those interview transcripts as the data

source. Overall experiences reported from these interviews will be reported elsewhere (manuscript under review). The objective of the initial survey was to describe the experiences of ICU nurses in terms of the impact of the pandemic upon their personal and professional well-being, how they were changed by the challenges of providing ICU care to COVID-19 patients and their families, their observations of ICU patient care for COVID-19 patients, and their beliefs on how the lessons learned from caring for COVID-19 patients might inform ICU care in the future. This secondary analysis of the interviews from the parent study is focused upon the concept of duty of care balance in the COVID ICU setting. American Association of Critical-Care Nurses (AACN) members were recruited through the AACN weekly e-newsletter. The study was also advertised on Facebook and researchers shared the survey link with colleagues and on social media (Twitter). This study protocol was reviewed and approved by the Marquette University institutional review board.

Interview Structure

One-on-one interviews took place from November 2020 through January 2021 and were audio recorded over virtual audio or video conferencing platforms based upon participant preference. The interviews were performed by two critical care nurse researchers (KC and NM) and were transcribed verbatim by a professional transcriptionist. All interviews consisted of a one-time, one-on-one virtual video conferencing meeting between the interviewer and participant. The interview was semi-structured based around a guide consisted of one primary guiding question: Can you tell me about what it has been like to work in the ICU during the COVID-19 pandemic? Additional probing questions included questions such as: What was the hardest part of the experience for you? What do you want people to know about your experience? In what way has this experience affected your personal/ professional well-being? Field notes were not included in this study. Interviews took approximately 30-60 min to complete.

Analysis

Interview transcripts were analyzed with content analysis. Content analysis consists of a process in which interview data is analyzed and coded for meaning and is then abstracted to better understand broad overarching themes contained within the data (Erlingsson & Brysiewicz, 2017; Hsieh & Shannon, 2005; Ravitch & Carl, 2021). Two investigators (JC and JG) independently read the original transcripts to get a sense of the data and identify meaningful text related to duty of care, professional roles, and the healthcare system. Coding was performed by hand without automation or software assistance. The concept of duty of

care is poorly defined within nursing literature, so a predefined theoretical framework was not utilized to guide this study.

Both investigators met as a team to discuss and come to a consensus upon preliminary coding. Each author then went back to the data to validate themes and subthemes as well as supportive exemplar quotations. Results were reviewed and discussed until consensus was reached that themes were representative of participant responses in the data set (internal validity and credibility). Transferability was enhanced with description of sample characteristics and selecting quotes that best represented the overall themes (Elo & Kyngäs, 2008). Credibility was enhanced via review of codes, quotations, and results from two additional authors familiar with the data set (KC & NM).

Results

Sample Characteristics

Thirteen nurses participated in interviews, resulting in data saturation. Participants were primarily staff nurses (76.9%) and female (92.3%) (Table 1). Thirty eight percent had less than 5 years of ICU experience.

Four overarching themes emerged from this analysis: (1) perceptions of betrayal or abandonment of nurses, (2) deviations from the normalized standard of care expectations, (3) feeling a moral obligation to care for COVID-19 patients, and (4) the expectation of self-sacrifice contributing to the experience of burnout.

Table I. Workplace and Participant Characteristics (N = 13).

| Characteristic | | N (%) |
|----------------|--------------------------|-----------|
| Nursing po | osition | |
| • | Staff Nurse | 10 (76.9) |
| | Nurse Manager/Supervisor | 3 (23.1) |
| Age years | | |
| | 20–30 | 3 (23.1) |
| | 31–40 | 4 (30.7) |
| | 41–50 | 2 (15.4) |
| | 51–60 | 2 (15.4) |
| | >61 | 2 (15.4) |
| Gender | | , , |
| | Female | 12 (92.3) |
| | Male | I (7.7) |
| Years of IC | CU experience | |
| | 0–5 | 5 (38.4) |
| | 6–10 | I (7.7) |
| | 11–15 | 3 (23.1) |
| | 16–25 | 1(7.7) |
| | 26+ | 3 (23.1) |
| CCRN cer | tification | , , |
| | Yes | 9 (69.2) |
| | | |

Theme 1: Perceptions of Betrayal or Abandonment of Nurses

Participants reported distress at changes to the work environment that resulted in increased workloads, decreased ability to provide care, and increased personal risk associated with their work. Nurses frequently described that they were expected to be self-sacrificing—to put themselves in harm's way to care for patients with a highly infectious disease. One expressed frustration at being called a hero by her employer: "I think if you call people heroes, then it's okay to push them off the cliff" (Participant #2). Several participants cited evolving or selective PPE recommendations due to PPE shortages; they felt the risks associated with COVID-19 were unfairly placed primarily upon nurses. "You can't say you don't need to wear it because PPE is running out. That's not fair. We're not stupid" (Participant #1).

Nurses had perceived a lack of safety for both their patients and themselves. Several participants expressed distress at their perceived expendability.

I feel like the systems that were put in place to protect us failed us. (Participant #2)

Administratively, no one cares we're expendable we're just like soldiers. (Participant #6)

Nurses reported that they felt like disposable assets and that their personal sacrifices to do their work despite such conditions were not valued.

The military accepts responsibility for the harm that they've caused but hospitals aren't accepting responsibility and they're denying accountability and they are changing the rules as we go and this risk was imposed upon me. I didn't sign a contract. I wasn't asked if I was willing to risk my life. It was just given to me, take it or leave it. (Participant 6).

Increased workloads and noted resources that were present during the early stages of the pandemic disappeared even though additional help was still needed to manage the workloads. Some nurses described minimization of ancillary staff like housekeepers and dietary staff, resulting in nurses being required to do work like mopping the floors in addition to their nursing duties. Nurses noted differences in how direct care and non-direct care staff were treated by hospital administration. They perceived a two-tiered system, in which the safety and needs of direct care staff were minimized while non-direct care staff enjoyed benefits like paid furlough:

We quickly realized that other parts of the hospital were being given furlough, like days off with pay, because they didn't have the same operations were going on. We were the ones that were working the hardest, but then other places were getting off-work [with] pay. And it just didn't seem to make sense. We were working overtime and working twice as hard, and there were other people that could have come in and done some of the work. (Participant #11)

Nurses felt like they were expendable or unvalued.

That's been kind of the overarching feeling is that, I am just a very easily replaceable clog in the machine. And yeah, that just my skills and my life, and same with my coworkers and other healthcare workers, just are not considered valuable. (Participant #13).

Two participants felt their employers had abdicated themselves of responsibility for nurses who tested positive for COVID-19. Participant #6 discussed the steps their health-care organization required them to take to obtain a COVID-19 test, and felt the process was designed to discourage nurses from finding out if they were safe to provide care. A nurse shared that her employer assumed that all nurses who tested positive for COVID-19 after managing COVID-19 patients became infected in the community, "...Because you can't prove that you got it in the hospital" (Participant #13).

Additionally, many nurse respondents felt abandoned by the healthcare organizations they worked for, and by trusted government authorities like the Centers for Disease Control and Prevention and the Occupational Safety and Health Association. National health authorities and government institutions were perceived to be deceiving the public about who was becoming ill through selective reporting:

When I first got out there, the government was saying it was all the elderly people with comorbidities that were dying.. My first day in the ICU and I walked in, and the patients were 35, 46, 54. They were all young, they were all young. (Participant #4)

Nurses expressed a sense of betrayal or abandonment by the general public. They cited COVID-19 denial as one source of betrayal and expressed frustration around noncompliance with public health guidelines. In the context of public noncompliance with public health recommendations, participants expressed cynicism with being called a hero by the general public.

Theme 2: Deviations From the Normalized Standard of Care Expectations

Nurses experienced changes to their professional roles that negatively affected their ability to care for patients. Participants experienced an increased workload during the pandemic. Higher than normal patient acuities, deaths far

exceeding unit norms, lack of ancillary staff, short or understaffing, particularly for patient acuity, were frequently mentioned as causes of the increased workload.

A lot of the hospitals I worked at, they significantly reduced their staff. So we didn't have any nurse aid a lot of times, the respiratory therapists weren't there. And so we were doing more work with fewer of us. (Participant #13)

Participants reported inability to provide care to the previously expected standard because of the increased workload.

We are expected to do the same amount of charting, the same detail of charting on these patients, and they are some of the sickest patients I've ever taken care of. (Participant #3)

Changes were made to their work to accommodate a new normal. Participants stated that previously unacceptable vital signs or lab values, such as hypoxia or blood gas values, were now seen as "pretty good." Excessive deaths, far beyond what was previously considered normal, was described as commonplace for some participants. Participants experienced rapid practice changes that were not necessarily in alignment with evidence or best care recommendations. Some participants noted that practice changes were related to infection control, such as clustering cares to reduce staff exposure to COVID patients and reuse of single-use PPE due to shortages. The changes experienced were frequent, "It seemed to change week by week, day by day, especially at the beginning" (Participant #13). COVID patient management was described as "trial and error," (Participant #4). One participant summed up the experience:

I talked about those impossible standards and they're impossible just within your nursing scope, and when you're asked to do things outside of that.. These patients are on 12 drips, easy, or eight, whatever. But just managing the drips alone and the vitals, blood pressures, and the almost consistent fevers and getting blood cultures every other day, just all those things. (Participant #5)

Numerous other changes to practice and the environment were reported related to the high acuity, lack of resources, and infection control: A participant described the experience of doing CPR on a prone patient who they kept prone during the resuscitation effort. Physical changes to the practice environment were reported, such as extension tubing on IV pumps to allow the pumps to be used without going into the patient rooms. Nurses described the process of creating beds for ICU patients in abnormal places, such as opening pediatric wards for adult ICU patients or opening previously closed areas of the hospital to accept ICU overflow admissions. Nurses expressed distress at the forced separation between patients and their families and the challenges of

using video conferencing software as an alternative to patient visitation.

Theme 3: Feeling a Moral Obligation to Care for COVID-19 Patients

Nurses experienced a sense of moral obligation toward, as well as a sense of pride in being able to, care for patients during the pandemic. Participants stated they felt a sense of moral or professional obligation to be a nurse during the pandemic, "someone had to do it" (Participants #5, 6).

And then I resolved that I had to be on the front line that I couldn't neglect someone that every day that I was capable, I was going to go in and fight the fight. (Participant #6)

I just wanted to go in, I wanted to help. (Participant #9)

If there were things like this going to happen, that I was going to make sure that I'd be a part of it. (Participant #7)

I feel like this is something that not only am I capable of doing but also somewhat of a moral obligation. (Participant #5)

Theme 4: The Expectation of Self-Sacrifice Contributing to the Experience of Burnout

Nurses expressed feelings of numbness, isolation, and diminished personal accomplishment both within and outside the workplace. Nurses expressed that the stress and challenges of their work had a significant effect on their personal and professional lives. Several participants found themselves questioning if they were doing enough for their patients. "So it's like whether I gave enough or not enough or I know enough or don't know enough, am I doing what's right by this patient?" (Participant #5). Nurses reported feeling helpless or disempowered that they could not do more for their patients, and consequent exhaustion was a prevalent theme. Participants expressed a sense of hopelessness; one participant remarked, "We're not seeing a light at the end of the tunnel." Nurses reported the uncharacteristically high death toll in the ICUs contributed to their sense of hopelessness (loss of personal accomplishment) and disconnection from their patients (depersonalization).

I would want people to know that we're doing everything we can and then some. It's just not effective (Participant #11).

Everyone's dying. It's hard to explain. I mean, patients have always passed away, but it seems like now once they're intubated, they really don't leave our ICU (Participant #10).

Nurses experienced distress at being powerless to help their patients. "You get sort of numb after awhile. You come back to work and the patient that you had taken care of died, but there's another one that is having exactly the same situation in that same room. It's over and over again." (Participant #2).

Increased irritability and decreased tolerance for other people as a result of their work-related stress was experienced by participants.

So on my days off, and when I would come home, I was finding, I was less patient with my husband, my kids and other outside life situations (Participant #8).

Nurses reported challenges functioning as normal during their non-working hours.

I found myself being very burdened and just worn out (Participant #5).

A lot of times it's like I don't want to get out of bed. I'll read, I'll listen to radio, I'll listen to some music, and then I'll fall asleep again (Participant #2).

Discussion

COVID-19 has changed the landscape of critical care nursing in the United States. This secondary analysis found four prominent themes that indicated changes to the duty of care balance: (1) perceptions of betrayal or abandonment of nurses, (2) deviations from the normalized standard of care expectations, (3) feeling a moral obligation to care for COVID-19 patients, and (4) the expectation of self-sacrifice contributing to the experience of burnout.

Duty of Care

Duty of care, professional and moral obligation to provide care for patients in the context of an effort-reward structure, is linked to several of the themes found in this study. Nurses described a sense of betrayal or abandonment by groups they previously placed trust in, such as their employers, federal healthcare authorities, and the public. Betrayal inherently implies a pre-existing expectation for behavior; nurses expected they would be protected and supported in a pandemic but felt betrayed when their expectations were not met by federal health authorities, the general public, or their employers. The disconnect between the nurse's preexisting belief that they would be protected or supported in the workplace and the reality of how nurses were treated in the workplace caused a disruption in the duty of care balance. In short, nurses perceive betrayal because they believed the social contract between themselves

professionals and the entities they worked within had been breached. In our study, some nurses expressed betrayal about specific issues such as PPE guidelines changing when there were resource shortages. Others expressed betrayal around the behavior of the public with regards to noncompliance with public health recommendations, as well as lack of accurate or consistent guidance from health authorities.

Nurses in this study expressed symptoms of burnout but simultaneously expressed feelings of obligation towards their work and their patients. Personal feelings of obligation towards one's work can prompt conflict in the presence of increased workloads and perceived betrayal by employers, customers, or governing bodies (Bennett et al., 2020; Foli et al., 2021). Burnout is a syndrome of exhaustion, depersonalization, and decreased personal accomplishment (Maslach & Jackson, 1981). Perceived betrayal and altered perceptions of duty of care increase the risk of burnout by creating a conflict between professional obligation and a hostile workplace that makes it increasingly difficult to fulfil obligations toward work. Burnout is a logical but underrecognized outcome for professionals who feel obligated to remain in a job in which they feel overburdened, undercompensated, and unappreciated for their work (Janzen & Phelan, 2015).

Altruism, Burnout, and Self-Care

Altruism is a commonly held ideal in professional nursing, however nurses in this study experienced barriers to altruism while caring for COVID-19 patients. Numerous participants reported they felt detached from their patients (depersonalization) such that it was difficult to form empathetic connections with them. Maslach and Jackson (1981) defined burnout as a syndrome of depersonalization, exhaustion, and diminished personal accomplishment. Several participants expressed concerns that they could not do enough for their patients, and others expressed a vicarious sense of betrayal on behalf of their patients who they felt may be suffering due to the actions of others. Numerous nurses described a repetitive cycle in which patients gradually worsened and died, and were quickly replaced by another patient who would inevitably go through the same cycle regardless of nursing or medical interventions. Nurses expressed depersonalization and distress at the seeming inevitability of the cycle of illness, deterioration, and death.

Participants described changes to the nursing landscape due to resource rather than patient needs. Averse conditions, such as those that nurses have reported during COVID-19, make altruism and "going above and beyond" impossible to accomplish. While altruism is not a tangible reward, inability to perform altruistic acts nonetheless decreases the reward that nurses receive from their work (Burks et al., 2012; Dotson et al., 2014). Reduced ability to behave altruistically therefore disrupts the effort–risk–reward balance inherent in the duty of care balance. In our study, nurses were expected

to perform their work under immensely stressful circumstances without access to resources like adequate staffing, and despite their sacrifices it made little difference in their patient outcomes.

While participants discussed their challenges, several also discussed the sense of professional pride they had for being able to work as nurses during a pandemic. Several nurses expressed a moral obligation and personal pride that they could care for COVID patients under such adverse conditions. This finding of professional obligation and self-esteem in being able to "answer the call" was consistent with prior studies on COVID nursing (Bennett et al., 2020; Foli et al., 2021; Missouridou et al., 2021).

Balancing Professional Effort and Rewards

Empathy and altruism are rewards nurses derive through their work, however, the lack of personal accomplishment articulated by many of the interviewed nurses raises an important question: If altruism is indeed one of the rewards for professional nursing, how does the workforce cope when the ability to behave altruistically is diminished? Is fulfillment of altruistic ideals part of nurse self-care, and should nurse wellbeing be dependent upon altruistic fulfillment in the workplace? These questions are particularly relevant during the COVID-19 pandemic, but also apply to pre-COVID nursing (Van der Wath & van Wyk, 2019). Chronic understaffing diminishes the amount of time a nurse can spend with their patient developing an empathetic bond or working to better the patient's condition (Dotson et al., 2014). Decreased reward and increased effort both alter the balance in the duty of care equation against nurses, fueling burnout.

COVID-19 has placed immense stress upon ICU nurses and exacerbated pre-existing mechanisms through which burnout is perpetuated. Nurse burnout and possible consequent attrition from the profession threatens the nursing workforce and jeopardizes high-quality patient care. However, nurse burnout cannot be fully addressed without consideration of the effort-risk-reward balance inherent in a professional work environment, nor can it be fully addressed without addressing the role of altruistic ideals within the profession. While altruism is a worthy ideal, the COVID-19 pandemic has demonstrated that the duty of care balance should not hinge upon a nurse's willingness to accept a suboptimal work environment because of the reward that altruistic acts can provide. Nurses in this study expressed an ethical compulsion to work with COVID-19 patients, which resulted in self-sacrifice as they continued to work under hazardous conditions without proportionate recompense.

This research supports the notion that retaining a strong nursing workforce cannot rely upon altruistic ideals as a reward for professional work; for both nurses and patients to thrive, nurses must be given adequate resources to perform their duties and compensated fairly for the challenges they face in the workplace. Further research is needed to address how the duty of care balance can be righted without reliance upon an intangible reward like fulfillment of altruistic ideals which may or may not be realistically possible in the workplace.

Limitations

There are several limitations to this study. The study sample was small, consisting of 13 interviews, which may not be fully representative of nurses working in COVID ICUs. This manuscript is a secondary analysis of interview data from a larger study of ICU nurses, which may have limited the data collected on the topics of burnout, duty of care, and ethical obligations to patient care. While JC and JG believed they had reached data saturation with regards to duty of care, evidenced by several consecutive transcripts with no new emerging themes, it is possible that data saturation was not met because the parent study was not focused explicitly upon duty of care. Data saturation was documented for the primary analysis of this data set however; information gathered may have been different if duty of care was the primary topic of inquiry for the parent study. Finally, the themes and connections drawn from the interviews were not verified by the participants themselves for confirmation of accuracy.

Implications for Practice

The COVID-19 pandemic has strained ICU nurses to their limits by increasing their work-related obligations, decreasing available resources to facilitate their work, placing them at personal risk related to their work, and diminishing the rewards they receive for continuing to perform their work. COVID ICU nurses experienced symptoms of burnout including depersonalization, decreased sense of personal achievement, and exhaustion due to their work during the pandemic. Burnout in turn results in increased patient morbidity and mortality, escalating nurse turnover, and career attrition from the nursing profession (Aiken et al., 2002; Borhani et al., 2014; Dotson et al., 2014). It is of urgent importance for healthcare administrators to provide an equitable workplace in which nurses have access to adequate resources in the workplace, are appreciated, and are appropriately financially compensated for their essential

Conclusion

In the professional environment, duty of care is a balance in which the professional's effort and personal risks are compensated with a reward structure. The COVID-19 pandemic has disrupted all three aspects of duty of care balance unfavorably for ICU nurses. This study adds to the previous

body of knowledge by describing nurse burnout in the setting of perceptions of alterations in duty of care including increased roles and responsibilities, decreased reward for their work, and increased risk associated with their work. Our study highlights that the duty of care balance has been altered by suboptimal working conditions and perceived betrayal thereby fueling nurse burnout. Further research exploring the duty of care among ICU nurses is needed. Curation of a culture of respect, appreciation, adequate resource allocation, and appropriate financial compensation for nurses is of critical and urgent importance in re-balancing nursing professional duty of care to address the burnout experienced during the pandemic.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Wallace Research Award.

ORCID iD

Jacqueline Christianson https://orcid.org/0000-0001-7149-4587

References

- Aiken, L., Clarke, S., Sloane, D., Sochalski, J., & Silber, J. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *Journal of the American Medical Association*, 288(16), 1987–1993. https://doi.org/10.1001/jama. 288.16.1987
- Altun, I. (2002). Burnout and nurses' personal and professional values. *Nursing Ethics*, 9(3), 269–278. https://doi.org/10.1191/0969733002ne509oa
- American Nurses Association (2015). Code of ethics for nurses with interpretative statements. American Nurses Association.
- Bennett, P., Noble, S., Johnston, S., Jones, D., & Hunter, R. (2020). COVID-19 confessions: A qualitative exploration of healthcare workers experiences of working with COVID-19. *BMJ Open*, *10*(12), e043949. https://doi.org/10.1136/bmjopen-2020-043949
- Borhani, F., Abbaszadeh, A., Nakhaee, N., & Roshanzadeh, M. (2014). The relationship between moral distress, professional stress, and intent to stay in the nursing profession. *Journal of Medical Ethics and History of Medicine*, 7(4). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4263391/
- Burks, D., Youll, L., & Durtschi, J. (2012). The empathy-altruism association and its relevance to health care professions. *Social Behavior and Personality: an International Journal*, 40(3), 395–400. https://doi.org/10.2224/sbp.2012.40.3.395
- Cohen, J., & van der Meulen Rogers, Y. (2020). Contributing factors to personal protective equipment shortages during the COVID-19 pandemic. *Preventative Medicine*, *141*, 106263. https://doi.org/10.1016/j.ypmed.2020.106263
- Cox, C. (2020). 'Healthcare heroes': Problems with media focus on heroism from healthcare workers during the COVID-19

- pandemic. *Journal of Medical Ethics*, 46(8), 510–513. https://doi.org/10.1136/medethics-2020-106398
- Dall'Ora, C., Griffiths, P., Ball, J., Simon, M., & Aiken, L. (2015). Association of 12h shifts and nurses' job satisfaction, burnout and intention to leave: Findings from a cross-sectional study of 12 European countries. *BMJ Open*, 5(9), e008331. https://doi.org/10.1136/bmjopen-2015-008331
- Dotson, M., Dave, D., Cazier, J., & Spaulding, T. (2014). An empirical analysis of nurse retention: What keeps RNs nursing? *Journal of Nursing Administration*, 44(2), 111–116. https://doi.org/10.1097/NNA.0000000000000034
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, *62*(1), 107–115. https://doi.org/10.1111/j.1365-2648.2007.04569.x
- Erlingsson, C., & Brysiewicz, P. (2017). A hands-on guide to doing content analysis. *Afr J Emerg Med*, 7(3), 93–99. https://doi.org/10.1016/j.afjem.2017.08.001
- Foli, K., Forster, A., Cheng, C., Zhang, L., & Chiu, Y. (2021). Voices from the COVID-19 frontlines: Nurses' trauma and coping. *Journal of Advanced Nursing*, 77(9), 3853–3866. https://doi.org/10.1111/jan.14988
- Goldman, J., MacMillan, K., Kitto, S., Wu, R., Silver, I., & Reeves, S. (2018). Bedside nurses' roles in discharge collaboration in general internal medicine: Disconnected, disempowered and devalued? *Nursing Inquiry*, 25(3), e12236. https://doi.org/10.1111/nin.12236
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. https://doi.org/10.1177/1049732305276687
- Janzen, M., & Phelan, A. (2015). The emotional toll of obligation and teachers' disengagement from the profession. *Alberta Journal of Educational Research*, 61(3), 347–350. https://doi. org/10.11575/ajer.v61i3.56115
- Kumar, A., Sinha, A., Varma, J., Prabhakaran, A., Phatak, A., & Nimbalkar, S. (2021). Burnout and its correlates among nursing staff of intensive care units at a tertiary care facility. *Journal of Family Medicine & Primary Care*, 10(1), 443–448. https://doi.org/10.4103/jfmpc.jfmpc_1651_20
- Labrague, L., & de los Santos, J. (2020). Fear of COVID-19, psychological distress, work satisfaction and turnover intention among frontline nurses. *Journal of Nursing Management*, 29(3), 395–403. https://doi.org/10.1111/jonm.13168
- Maslach, C., & Jackson, S. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99–113. https://doi.org/10.1002/job.4030020205
- Missouridou, E., Mangoulia, P., Pavlou, V., Kritsotakis, E., Stefanou, E., Bibou, P., Kelesi, M., & Fradelos, E. C. (2021). Wounded healers during the COVID-19 syndemic: Compassion fatigue and compassion satisfaction among nursing care providers in Greece. *Perspectives in Psychiatric Care*, 1–12. https://doi.org/10.1111/ppc.12946
- Mutambudzi, M., Niedzwiedz, C., Macdonald, E., Leyland, A., Mair, F., Anderson, J., & Demou, E. (2021). Occupation and risk of severe COVID-19: Prospective cohort study of 120 075 UK biobank participants. *Occupational and Environmental Medicine*, 78(5), 307–314. https://doi.org/10.1136/oemed-2020-106731
- Ravitch, S., & Carl, N. (2021). Qualitative research: bridging the conceptual, theoretical, and methodological (2nd ed.). Sage Publications.

Reid, L. (2005). Diminishing returns? Risk and the duty to care in the SARS epidemic. *Bioethics*, 19(4), 348–361. https://doi.org/ 10.1111/j.1467-8519.2005.00448.x

- Shah, A., Wood, R., Bishop, J., Smith-Palmer, A., McMenamin, J., Fischbacher, C., & Colhoun, H. (2020). Risk of hospital admission with coronavirus disease 2019 in healthcare workers and their households: Nationwide linkage cohort study. *BMJ*, 371, M3582. https://doi.org/10.1136/bmj. m3582
- Sokol, D. (2006). Virulent epidemics and scope of healthcare workers' duty of care. *Emerging Infectious Diseases*, 12(8), 1238–1241. https://doi.org/10.3201/eid1208.060360
- Terry, L., Carr, G., & Halpin, Y. (2017). Understanding and meeting your legal responsibilities as a nurse. *Nursing*

- Standard, 32(12), 52–63. https://doi.org/10.7748/ns.2017.
- Tingle, J. (2010). Commentary on young A (2009). Review: The legal duty of care for nurses and other health professionals. Journal of Clinical Nursing 18, 3071–3078. *Journal of Clinical Nursing*, 19(1-2), 297–299. https://doi.org/10.1111/j.1365-2702.2009.03058.x
- Tomlinson, T. (2008). Caring for risky patients: Duty or virtue? *Journal of Medical Ethics*, *34*(6), 458–462. https://doi.org/10.1136/jme.2007.022038
- Van der Wath, A., & van Wyk, N. (2019). A hermeneutic literature review to conceptualize altruism as a value in nursing. *Scandanavian Journal of Caring Sciences*, *34*(3), 575–584. https://doi.org/10.1111/scs.12771