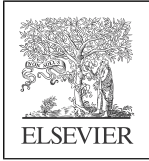




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Nurses confronting the coronavirus: Challenges met and lessons learned to date

Connie M. Ulrich, PhD, RN^{a*}, Cynda H. Rushton, PhD, RN^b, Christine Grady, PhD, RN^c

^aUniversity of Pennsylvania School of Nursing and Perelman School of Medicine; New Courtland Center for Transitions and Health

^bJohns Hopkins University School of Nursing and Berman Institute of Bioethics

^cDepartment of Bioethics, National Institutes of Health Clinical Center

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ABSTRACT

Registered nurses are an essential workforce group across the globe. They use their expertise and skill sets every day in clinical practice to protect, promote, and advocate on behalf of patients and families under their care. In this article we discuss the physical, emotional, and moral stresses that nurses are experiencing in their day-to-day practice settings created by the novel coronavirus. We consider the demands placed on nurses by unexpected patient surges within hospital environments and inadequate personal protective equipment and other critical resources, challenging nurses' ability to meet their professional and ethical obligations. We also share our thoughts on supporting nurses and others now, and ideas for needed healing for both individuals and organizations as we move forward. Finally, we argue for the need for substantive reform of institutional processes and systems that can deliver quality care in the future when faced with another devastating humanitarian and public health crises.

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“Nursing is not just evaluating patient symptoms, dressing wounds, lab work, and value-based care—nursing impacts the soul in each of us. In our weakest places, in our most vulnerable areas of life, nursing has literally opened the door to the most painful, but most rewarding moments in the lives of others. The dying, the hurt, the raw, emotional places of life: nurses have the privilege to walk in these spaces and provide a comforting hand, a compassionate touch, and a life-changing presence.”

— Love et al., 2021, 87

Introduction

Nursing is the nation's largest health care professional group, with nearly 4 million registered nurses licensed to practice in the United States ([American Association of Colleges of Nurses, 2019](#)). In fact, nurses are critical to every health care delivery system across the globe. The World Health Organization cites a global deficit of 5.9 million nurses to adequately meet the current and future care needs of the growing population ([Love-lace, 2020](#)). Most U.S.-based nurses today work in hospital-centered systems, but they also practice in long-term care facilities, community settings, and primary

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*Corresponding author: Connie M. Ulrich, University of Pennsylvania School of Nursing.

E-mail address: culrich@nursing.upenn.edu (C.M. Ulrich).

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care, among others. Nursing has long been defined from a tripartite perspective: A practice, an art, and a science with ethical foundations that guide the profession. It is also recognized as a caring and trusting vocation by the diversity of publics served by nurses—a profession that is committed to meeting the basic and complex humanistic needs of the healthy and the sick.

Nursing is not an easy career path. Nurses have sometimes been portrayed in subservient roles and in misogynistic ways, given the fact that approximately 90% of nurses are women. Nurses who work at the bedside, however, demonstrate competence as they face unique challenges and see patients at the sickest and most vulnerable moments in their lives. Some of the competencies and skill sets that nurses possess are enacted behind hospital walls and thus not visible to the general public. Nurses' intelligence, expertise, compassion, ingenuity, dedication, and agility to adapt to changing circumstances are markers of excellence. But as Christie Watson notes, "There is a danger of forgetting what nursing is, what it means: the importance of providing care." (2018, 197).

The novel SARS-CoV-2 pandemic has brought nursing to the forefront in unexpected ways and has shown the public in real-time nurses' valor and their core values as well as their vulnerabilities. It has also exposed the fractures and inefficiencies within health care systems that have a responsibility to protect nurses and other clinicians and has highlighted the many ethical issues that these frontline health care workers encounter daily. This essay will focus on three critical ethical issues: (a) the daily demands of nursing care for patients with COVID-19 and the physical, emotional, and moral toll of these demands; (b) the importance of an ethical workplace environment and supportive systems for nurses' physical and psychological safety and effective moral agency; and (c) the need for infrastructure reform and institutional processes that can move us forward in the aftermath of the SARS-CoV-2 pandemic.

The Daily Demands of Nursing Care for Patients with COVID-19

With more than 27 million confirmed cases of COVID-19 and more than 890,000 deaths globally as of the beginning of September ([Johns Hopkins University & Medicine Coronavirus Resource Center, 2020](#)), nursing care has been stretched to its limits. The United States is also suffering with a steady increase of fatalities that is beyond 190,000 deaths in September ([Johns Hopkins University & Medicine Coronavirus Resource Center, 2020](#)). The demand for nursing care has rarely been as high, and the consequences of providing it never more severe. Nurses go to work every day under conditions of uncertainty. Indeed, regardless of their clinical specialty or practice setting, nurses have always understood that there is an inherent risk that comes with being a nurse. In their day-to-day work settings, they can be exposed to occupational

hazards such as needle-stick injuries, back and muscular strains, splashes from contact with blood and body fluids, verbal and physical abuse, and fumes from noxious chemicals and disinfectants. Nurses have also donned personal protective equipment to care for patients with HIV, Ebola, tuberculosis, methicillin-resistant *Staphylococcus aureus* (MRSA), and other infectious diseases. And they have done so by upholding and honoring their professional and ethical commitment to promote and respect the dignity and worth of all patients in their care—and by assessing what they believed to be an "acceptable risk" for the overall benefit of the patient.

The emergence and highly contagious nature of this coronavirus, however, has shattered traditional standards of practice. The lack of adequate personal protective equipment and general lack of institutional preparedness for the volume of COVID-19 patients within hospital systems has left frontline nurses susceptible—physically and emotionally—to a persistent sense of guilt and anxiety. While we often think of patients as being vulnerable because of their illness or other underlying circumstances, nurses, too, are vulnerable to multiple stressors as well as to infection and illness. Stress is exacerbated in clinical practice when health care clinicians' claims or voices are discounted ([Hurst, 2008](#)). Danis and Patrick argue that "risk factors that influence health are so encompassing that any member of the population may, at some point in his or her life course or in some special circumstance, be vulnerable" (2002, 311). What nurses assumed would be available to protect them simply is not reliably there. Photographs and videos of nurses in makeshift masks and goggles and protective gear made from garbage bags have stunned and angered viewers across the U.S., as have the tears of sorrow and mental anguish on the faces of many nurses trying to cope with the pressures of an unimaginable situation. Nurses themselves have become, and will likely continue to become, infected, and several hundreds have died from the disease ([The Staffs of Kaiser Health News and The Guardian, 2020](#)). The Centers for Disease Control and Prevention (2020) estimates that at least 156,000 U.S. health care workers had become infected with COVID-19 by early September, recognizing that this is an underestimate.

In other countries, the infection rate has been remarkable with more than 37,000 health care workers infected in Spain, accounting for 20% of confirmed cases in that country ([McMurtry, 2020](#)).

Nurses are working long hours caring for COVID-19 patients, wearing masks that make their skin bleed and are suffering under the heat of whatever gear they have available to protect themselves and their patients. They are being asked to transfer from one unit to another to cover shortages, sit alone with patients who are dying, and suffering anxieties and fears from walking through hospital doors to begin another shift. Indeed, an early American Nurses Survey of more than 30,000 nurses across the country in

April reported that 87% of nurses are very or somewhat afraid to go to work, 58% are extremely concerned about their personal safety and 55% about caring for a COVID-19 patient or person suspected of having the virus ([American Nurses Association, 2020a, 2020b](#)). With this worry and others, some nurses decided to leave their jobs, but many others have carried on. Multitudes of nurses are working hard and meeting these challenges, finding the strength to continue to provide care and relieve the suffering of patients despite constraints, adversity, and unavoidable deaths. Both groups—those who chose to leave and those who chose to carry on—are facing situations that may lead to moral distress—the distress that arises when the ethically appropriate action is not taken because of internal or external constraints ([Ulrich & Grady, 2018](#)). In addition, fear of reprisal is ever looming if nurses speak out about their concerns. How do we begin to rebuild trust in a system that has fundamentally challenged our notions of how to do “good,” how to safely protect patients, families, nurses and other clinicians on the front lines of a pandemic, and how to provide care to patients in need with limited resources?

Selected Internal and External Approaches to Support Ethical Environments, Nurses’ Moral Agency and Well-being

The environment in which nurses deliver care matters greatly.

“Organizations depend on their members to make difficult ethical choices, to accomplish ambitious tasks, to take initiative and drive performance, to persevere in the face of adversity, to engage in experimental activities related to change, and to guard what is right in the face of threats.” ([Worline, 2012, 307](#)).

Ethical practice environments where nurses voices are heard and respected, where teams work well together, where institutional leaders support their staff, do everything they can to garner appropriate resources, and adapt policies to protect staff should be the standard. In these environments, nurses and others can say no to unsafe conditions or procedures without fear of repercussions. Nurses can, and should, demand appropriate resources and staffing levels, and work on teams where members support each other in providing care as safely as possible, and institutions should support difficult decisions made because of extreme scarcities ([Table 1](#)).

Certain priorities should guide efforts to help nurses, other health care providers, and institutions to get through this time of crisis. It is essential to advocate for and take care of basic needs right now. Nurses need breaks during their work/ shifts, time to eat and access to healthy food, as well as time off and the opportunity to rest and sleep ([National Academy of Medicine, 2020](#)). Although it may seem obvious that

these basic needs should be attended to, the demands in some areas are so great that some nurses are not getting breaks, access to food, or time off. In addition, institutions should provide nurses and other frontline providers with accurate and consistently updated information and guidance on how to use personal protective equipment (PPE), what to do when it is lacking, and how to proceed when patient care conditions are unsafe ([American Nurses Association, 2020b](#)).

It is unreasonable and unfair to expect individual nurses to care for so many critically ill patients at once that no one receives good care, or to expect nurses to provide care that puts them at high risk without adequate information and PPE. To the extent possible, resources should be made available to support the work of bedside nurses and other front-line providers. There are examples of creative and resourceful use of technology to provide resources at the bedside. For example, telemedicine can connect providers in remote locations via computer; FaceTime and other video communication options provide tools for nurses to help patients communicate with their loved ones, especially at the end of life. In addition, using Artificial Intelligence to assist staff in monitoring patients with COVID-19 could reduce workload burden and contact time that potentially affects nurses’ exposure to virus. Machine Learning algorithms that determine a risk deterioration index allows for initiation of early treatment intervention ([Ross, 2020](#)). Neither is without ethical concerns and need more data on outcomes compared to standard practice.

Resources such as palliative care can help to support patients and families during isolating illness and help them express their preferences and choices. Ethics consultation services can help nurses, other providers, patients and families, and institutions make difficult and sometimes heartbreaking decisions. Some institutions have consult services devoted to addressing moral distress among health care providers and others are providing virtual Moral Resilience Rounds ([Herleth & Paiewonsky, 2020](#)). One suggested approach for dealing with stress in real time is to encourage informal, voluntary peer-to-peer relationships (such as buddy systems) between colleagues, friends, and team members to provide ongoing support and encouragement. Programs such as Resilience in Stressful Events (RISE), a peer to peer psychological support model, offers nurses an additional resource to address the stress and trauma they are experiencing ([Wu, Connors, Everyly, Jr., 2020](#)). Chaplains in many institutions are providing spiritual support and some institutions are expanding their mental health services using volunteer mental health professionals to respond to requests from frontline clinicians. Creative external strategies for supporting health care workers also have been reported in some regions. Examples include medical and nursing students providing childcare for working health care providers, community volunteers delivering food for ICU or nursing home staff, and hospitals offering temporary housing for frontline

Table 1 – Selected Internal and External Approaches to Support an Ethical Environment, Moral Agency, and Clinician-Staff Well-Being

Internal Approaches	Benefits
<ol style="list-style-type: none"> 1. Explicit policies to protect staff from harm (e.g., breaks and rest periods, staffing, use of personal protective equipment; limits to the number of hours worked per shift) 2. Access to palliative care, ethics consultative service, chaplaincy, and other In-house resources 3. Innovative resources: Virtual moral resilience rounds; Resilience in stressful events (RISE); Moral distress consultative service 4. Use of Artificial Intelligence: Robotics 	<ul style="list-style-type: none"> • Respects staff, protects their well-being, and enhances their contributions to quality patient care • Promotes organizational transparency and commitment to supporting patients, families, and staff • Recognizes unique ethical challenges faced by clinicians and innovative mechanisms to foster well-being • Advances solutions when physical distancing is required and aids nursing staff by transporting supplies, disinfecting rooms, and using telemedicine technology to communicate with patients and families (Murphy, Adams, & Gandudi, 2020)
Selected External Approaches	Benefits
<ol style="list-style-type: none"> 1. Medical and nursing students providing childcare 2. Hospital systems providing temporary housing 3. Volunteers delivering food 4. Legislation to protect the rights of essential workers 	<ul style="list-style-type: none"> • Provides basic human needs for clinicians to support their well-being, lessen worries and anxieties over children, strengthens, supports, and protects their rights

providers worried about bringing possible infection home to elderly or ill family members or very young children, among others.

Infrastructure and Institutional Process Reforms

Planning to address the needs of nurses and other frontline providers over the long term is essential. Three priorities include practice-based programs, policy, and research. Institutions, professional organizations, and others will need to establish programs to engage nurses and others to process what they have been through and to identify and describe the challenges they are confronting during this crisis. We will need strategies and programs to help frontline providers cope with what they have experienced, opportunities to debrief about specific cases or issues, and support services to help contextualize tragic decisions that nurses and others will have to live with. Institutions should develop programs to cultivate moral resilience and bolster moral strength. Research will be needed to guide efforts at recovery, resilience, and restoration.

From a programmatic and policy perspective, hospital administrators have an opportunity to rebuild trust with frontline clinicians by taking seriously the burden they have shouldered and the sacrifices they have made and investing in systemic solutions. The novel coronavirus pandemic arose in the context of an already stressed health care system that was contributing to escalating levels of burnout among nurses and other health care professionals. Reports published before the pandemic showed that 35% to 45% of nurses experience at least one symptom of burnout—an occupational syndrome characterized by “exhaustion, cynicism and inefficacy” (National Academies of

Sciences, Engineering, and Medicine, & National Academy of Medicine, 2019, 40). Burnout in health care reflects a complex interplay between personal and organizational factors that create the conditions for burnout to thrive. When job demands such as excessive workload, inadequate resources, workflow distractions exceed job resources such as job control, alignment of values and expectations, and organizational culture, burnout is more likely to ensue. This should raise alarm bells about the magnitude of potential burnout resulting from this pandemic. A recent report by the National Academies of Medicine (NAM, 2019) concluded that health care system characteristics significantly contribute to burnout. The intensity of the global pandemic and the lack of preparation contribute to widespread suffering and long-term consequences for both nurses and the health systems where they practice. We are poised to proactively document the wide range of consequences (physical, psychological, moral, spiritual) as we begin to heal from the pandemic and to use this information to inform redesign.

Health care leaders are ideally positioned to demonstrate their investment in the well-being of frontline clinicians by taking proactive steps to assure that the deficiencies in the health care system are substantially addressed. During the pandemic, nurses are expected to provide high level care for their patients often without adequate resources to do so safely and effectively. Actively involving frontline nurses in devising the solutions that are needed to avoid the challenges that the pandemic has revealed is an important step in rebuilding trust and work engagement. Listening to and acting upon their recommendations can be a visible indicator of a shift from business as usual. Creating the infrastructure in health care organizations to

address ethical concerns without fear of retribution is no longer optional. Even in an otherwise healthy ethical workplace climate, where one feels supported and has a positive view of the organization's usual ability to address ethical concerns and problem solve difficult challenges, the demands and expectations of caring for COVID-19 positive patients are shattering perceptions of support and trust.

Empirical bioethics research can be important during a pandemic because it facilitates understanding the day-to-day ethical issues and challenges that nurses and other clinicians are experiencing (Ulrich, Anderson, & Walter, 2020). Previous research found that nurses and others want respect within their workplaces but do not always feel psychologically safe to voice their concerns for fear of retribution (Danis et al., 2008; Ulrich et al., 2007). During this pandemic, there have been examples of retribution for nurses who voiced concerns, including being dismissed from the workplace. Nurses' ability to act as moral agents for their patients and families is sometimes thwarted. A nationwide survey of 1,200 nurses from more than 400 hospitals in early April 2020 reported that 78% were experiencing physical, emotional, and mental stress and 67% were planning to leave their facility (Lunsford, 2020). These data speak to the suffering that is occurring across the country and the need for both individual and organizational healing. How should we proceed in helping nurses and others regain a sense of meaning in their workplace and address their shared experiences? What systemic reforms are needed to create cultures where integrity and well-being can thrive? More qualitative and quantitative data from front-line workers and those most affected by SARS-CoV2 can help researchers identify meaningful improvements for implementation within and across health care systems; and bringing forward nurses' voices for the public and others in key administrative and policy positions demonstrates not only their challenges but also their unparalleled value.

What Lessons Can We Carry Forward?

There are several lessons we should take away from the COVID-19 pandemic, and we are still learning. First, nurses must use their voices for change. Second, organizations have moral responsibilities to their employees; and third, although there continues to be moral failures and disruptions from the SARS-CoV-2 virus within the broader public sphere, we must also look to the moral successes as a roadmap for the future.

It would be easy to remain in a state of moral outrage—a predictable and justified response to threats or violations of ethical values or standards (Rush-ton, 2013). When activated, moral outrage can instigate a cascade of blame, shame and retribution and deplete vital energy needed to confront the crisis in front of us. Possible targets of our moral outrage include the myriad factors that result in lack of PPE, clear guidelines regarding proper protection during a

pandemic, or health care organization culture that silences the voices of concern about the safety of patients or clinicians. This pandemic has forced nurses and others to face many difficult professional, ethical, and philosophical questions, — from those that directly affect the individual nurse to those that affect the profession, the patients and families they serve, the systems in which they work, and the policies that have, and will impact their future practice. Hospitals' and health systems' lack of preparedness for the care of COVID-19 patients has frightened many nurses, and more than 80% have reported fears of going to work with 43% indicating they made their own PPE (American Nurses Association, 2020). An important broader question is how this might change the nursing workforce when this crisis abates.

Given the enormity of the tasks ahead, we must harness moral outrage and instead use its power to fuel constructive progress rather than leaving a destructive swath of suffering, powerlessness, and fear (Rush-ton, 2013). Yes, the public has applauded and praised the momentous efforts of nurses and other clinicians, recognizing their commitment through enduring struggles. Support for nurses must, however, go beyond this. Substantive discussions about hazard pay, state-mandated staffing ratios, policies that protect those who speak out about unacceptable risks, infrastructure redesign solutions, ethics training for future clinicians, and the characteristics and quality of leadership within organizations and systems that engender trust, transparency, and compassionate responses are worthwhile goals. Our moral outrage and lessons learned can also stimulate constructive action to address the underlying structures, patterns, policies, and norms that have contributed to the conditions that created or exacerbated challenges that nurses are confronting. The U.S. Congress has considered a bill that would support the rights of essential workers and address safety and whistleblower protections, compensation relief, collective bargaining agreements, and corporation's accountability, among other areas. Powley (2012, 864) asks us to consider several important questions related to organizational healing following traumatic events and disruptions that affect groups within those systems. These include: "What is strengthened after crisis?" "What outcomes are important to examine with respect to healing?" "How does one know whether an organization has healed?" Healing from the difficult emotions surfacing from the coronavirus pandemic will take time.

Organizations should begin to work toward building positive ethical climates by repairing interpersonal connections through compassion and collective support, and by understanding and fortifying the different types of strengths (moral, physical, and emotional) that allow their clinicians to meet shifting priorities with the volume of patients in need of nursing care, and uncertainties about whether resources will be available to meet these care needs on a day-to-day basis. Understanding how our strengths support our

individual and collective ability to confront moral adversities with integrity might allow every person to remain whole and undiminished. Our capacity to be morally resilient in the midst of these challenging times can help restore our integrity and our moral community. This begins with acknowledgment that the inherent worth and the resilient potential that resides in everyone can be strengthened through strategies aimed at healing the wounds that the pandemic has created (Rushton, 2018). Leaders committed to cultivating the conditions that foster moral resilience are uniquely poised to implement the recommendations of the American Nurses Association Call to Action that outlines strategies for individuals, leaders, and organizations (American Nurses Association, 2017).

Leveraging the collaboration and collegial support that has arisen during the pandemic could also promote healing our organizations. The pandemic may help us identify and begin to dissolve structures that do not perform well, create new patterns and the kind of workplaces that better serve not only patients but the people who serve in them. It is an opportunity to reclaim values foundational to our professions, establish new norms of communication and teamwork, intentionally address disparities and power imbalances, and foster professional and relational integrity. The pandemic has brought into sharp focus our interconnectedness and how intertwined our individual integrity is with the integrity of others and the moral ecosystem we reside in. Relational integrity enables us to preserve our personal and professional integrity by considering what we owe each other as part of our moral community and what expectations and commitments we are willing to hold ourselves accountable for (Rushton, 2018).

Finally, we must remember the nurses who go to work every day, endure many hardships, care for their patients, save lives, and touch "... the soul in each of us". They found the courage to persevere even when facing risk themselves, and even death. We must recognize that although there were moral failures, there were many moral successes that reflect the integrity of individuals, teams and organizations. We now must choose to look forward, advocate for and commit to change, and rebuild a broken health care system after this coronavirus leaves so many vulnerable in its path.

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