



Nursing and Health Policy Perspectives

The US COVID-19 crises: facts, science and solidarity

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The United States leads the world in COVID-19 cases and deaths. The government's poorly coordinated response has lacked national mandates, failed to deploy adequate personal protective equipment, supplies and testing and devalued advice of science experts. COVID-19 exposed racial disparities in health care and as protests against racial injustice erupted, nurses have responded to the call to confront racism as a public health crisis. Nurses also suffer from lack of personal protective equipment, burnout, extreme workloads, overwhelming deaths and fear of contracting COVID-19. While facing danger, nurses have implemented practice changes and fostered new roles and teamwork to provide safer care. Advancing policy to provide personal protective equipment as well as financial and mental health support for nurses is a priority nationally and globally.

Keywords: Burnout, COVID-19, Mental Health, Pandemic, Personal Protective Equipment, Racism, Social Justice, United States, Well-Being

Courage, caring and compassion collided with COVID-19 in a year like no other. The 72nd World Health Assembly had designated 2020 as the International Year of the Nurse and the Midwife on May 28, 2019 (World Health Organization, 2019). 2020 was to have been a year-long celebration to recognize the central role of nurses and midwives in achieving universal health coverage and elevate the profession. Nurses worldwide would have advocated for increased investments to improve work environments, education, leadership and gender equality, as well as commemorate Florence Nightingale's 200th birthday. Instead, the pandemic forced nurses to trade praise for personal protective equipment (PPE) that was often substandard or insufficient. Instead of showcasing how nurses solve healthcare problems and serve whole communities, images revealed the battle scars of long hours behind masks. While we have accomplished the goal of raising the profile of the profession, it has been at the unforgivable cost of physical and emotional exhaustion as well as lives sacrificed facing down this deadly virus. Throughout this paper, we have included the voices of nurses on the frontlines that were submitted to the American Nurses Association from a variety of sources.

From Festivities to Fear

At the end of 2019, the media began reporting about a novel virus in China but it was not apparent the world was destined for a pandemic. By the time the World Health Organization (WHO) declared the novel coronavirus outbreak as a public health emergency of international concern on January 30, 2020, twenty countries had reported cases of 2019-nCoV

(WHO 2020a). The WHO assigned the official name COVID-19 on February 11, stepping up its guidance for preparedness, readiness, and response to reduce risk and curb transmission (AHA 2020). The International Council of Nurses (ICN) led the international nursing community to mobilize support for nurses and other health professionals by calling on governments to provide essential personal protective equipment (PPE) and address the unprecedented physical and psychological pressures of caring for COVID patients. Fear of the unknown was mounting and fear of dying from this lethal and invisible foe began taking its toll on nursing and healthcare provider (HCP) lives. The ICN implored governments to collect and standardize reporting on healthcare worker infection rates and deaths due to COVID-19, a plea that continues to be poorly addressed.

The US story begins

At a 2018 WHO event remembering the 100th year anniversary of the pandemic, United States Secretary of Health and Human Services (HHS) Azar noted that since 1918, the world has had a clear directive to coordinate international efforts to prepare for global spread of disease knowing it is not confined by borders. He cited influenza as the top health security threat to the world, stressing the need for a global health security agenda. When asked, "Are we ready for another pandemic?", a team of scientists answered unanimously, no. Sadly, this prophetic conclusion was confirmed--the world was not prepared for COVID-19.

The United States is the 3rd largest country in the world with over 330 million people or about 4% of the world's

population. By all appearances, the United States was ill prepared for the pandemic. A little-known step taken prior to 2020 that may have compromised the country's response was the disbanding of the global health security and biodefense unit, the group that would lead the US response to a deadly pandemic. Many believe this action weakened the country's ability to integrate both US and overseas readiness and response (Konyndyk 2020; Sun 2018). When an epidemiologist with the Centers for Disease Control (CDC) left her post as resident adviser to the U.S. Field Epidemiology Training Program in China, the position was not refilled (Taylor 2020). It is unclear whether or not having someone there would have accelerated learning about China's COVID-19 experience and inform prevention measures.

COVID-19 Comes to the United States

The United States confirmed its first case of COVID-19 on January 20 in a 35-year-old male who had returned from Wuhan, China to Washington state (CDC 2020). On January 30, as the WHO acknowledged coronavirus as a public health emergency of international concern, HHS Secretary Azar declared the coronavirus a public health emergency in the United States (HHS 2020). This declaration allowed state, tribal and local health departments to seek authorization to reassign personnel to respond to the pandemic across public health programs. The CDC updated its interim guidance for clinicians on identifying and treating COVID-19 infections and augmented its work with state health departments for disease surveillance and contact tracing. HHS agencies pursued development of diagnostics, vaccines and therapeutics to detect, prevent and treat COVID-19.

The government established the White House Coronavirus Task Force at the end of January to coordinate all aspects of the US response to monitor, prevent, contain and mitigate COVID-19 (White House 2020a). Throughout the month of February, the country struggled to establish testing. Cases were mounting with significant outbreaks in New York, California and Washington state. The government wanted to develop its own testing, however the early tests developed by the CDC proved flawed. The time lost in this first line of defense—detecting the virus—has continued to haunt the country as short supply of equipment, swabs and reagents continues to impede testing volumes.

By March 11, the WHO declared the pandemic citing alarming levels of spread and severity as well as inaction (WHO 2020b). Hospitals began preparing for the onslaught of COVID patients and rapidly discovered that stores of PPE were depleted and the global supply chain disrupted. The United States declared a national emergency retroactive to

March 1 and adopted emergency response legislation to fund coronavirus preparations and response (White House 2020b). Regulatory relief allowed easing of some requirements and increased payments for services such as telehealth. The country led accelerated efforts to develop diagnostic tests, therapeutics and clinical trials for vaccines and provided resources for manufacturing companies to redirect their operations to produce PPE.

The Perfect Storm

Public health events rarely occur in a vacuum. They are subject to overlays of other global, national, social and political events that influence how people react and color the commentary about their experiences. The political polarization of the country in an election year fueled significant disagreements resulting in delayed action or inaction on many issues. Interventions to control the virus fell short, in part, because of the failure to mount an effective, coordinated, national response. New York City became the epicenter by late March and by April, US death rates had surpassed those in other countries. Infections initially concentrated on the coasts began to spread rapidly throughout the nation.

Scientists were quickly trying to learn about this new virus. Disproportionate impact on ethnic and minority communities confused and frustrated experts. Nurses adjusted patient care as new information became known about the virus while pleading for PPE to safeguard themselves, their patients and their families. States were forced to adopt their own approaches to control and mitigation as trusted government institutions failed to provide clear guidance based on science and evidence. Government leaders also actively ignored or rejected science and gave false hope by announcing unrealistic timelines for vaccine availability, touted unproven drugs and minimized severity of the virus. The dwindling supply of PPE, essential life-saving technologies and testing forced state lockdowns and implementation of social distancing restrictions which drove economic decline across many business sectors. Healthcare organizations were either overwhelmed with the onslaught of COVID patients, or trying to recover from sitting idle after closing down services to make room for COVID patients who never arrived. As citizens grew tired of the restrictions, some state authorities relaxed containment measures prematurely to reopen economic activity resulting in a resurgence of infections.

The spiraling stress of rampant illness and deaths and personal financial devastation was disrupting the country. What came next, however, the tsunami of social unrest sparked by the murder of George Floyd, a Black man, at the hands of police on May 25, caused an eruption of outrage not seen in

decades. Both in the United States and around the world, demonstrations supporting Black Lives Matter and civil rights of all people prevailed for weeks. Adding to the social pressures were natural disasters including tornadoes and flooding in the Midwest, massive wildfires in California, Washington and Oregon, as well as 5 hurricanes and 4 tropical storms all of which forced people from their homes, causing severe damage and loss of life across several states.

Stress and burnout on nurses

Social injustice, personal loss, a contentious Presidential election and inability to control the virus compounded the stress and burnout of nurses and other healthcare workers creating serious mental health consequences. Nurses were forced to push aside these stressors as they cared for COVID-19 patients, being thrust into survival mode with constant weariness, grief and fear. Those with preexisting mental health challenges were at greater risk for burnout and even suicide. The convergence of COVID and the epidemic of burnout among healthcare practitioners (HCP) has been deemed a parallel pandemic (Dzau et.al. 2020). National efforts are focused on encouraging organizations, the government and individuals to take seriously the need to implement system solutions to ensure healthy positive work environments that champion well-being and resilience.

'I feel powerless because even though I try my hardest to give the care I want to give, it is still not enough. I don't know who will survive and who won't and that scares me. We as healthcare professionals are exhausted...physically, emotionally and mentally. I try to be there for my patients because they are scared and lonely but I'm being pulled in so many directions. Code after code, death after death, who do you go to first?... I leave my job every time crying, upset that I should have done more, when in reality every part of me has been burnt out. Finally, to come home to an empty apartment because I try to isolate myself so that I won't infect my children, my husband, my parents and my in-laws. It's a sad, terrifying, exhausting, lonely time being on the front lines right now.' AM

Dealing with the Dying, Deaths and The Dead

'COVID-19 is a beast. It...makes something as mundane as breathing an impossible feat, sometimes despite the help of a ventilator and drugs. My heart aches for the patients we have lost... Holding a stranger while they take their last breaths in the absence of loved ones feels wrong in so many ways.'

One of the greatest challenges that nurses faced was connecting family to seriously ill loved ones. Families were

restricted from visiting in hospitals, long-term and post-acute care facilities. They dropped off loved ones at emergency departments never to see them again. So many patients died without their family or loved ones by their sides and without a goodbye. Nurses used innovative technology solutions to close the unbearable human connection gaps between patients and families. The sheer number of deaths, coupled with loss of family members and colleagues proved to be overwhelming. Images of refrigerated trucks serving as makeshift morgues dominated the news and left an indelible mark in the minds of many. Findings from the July 2020 American Nurses Foundation (American Nurses Foundation, 2020) Mental Health and Wellness survey of nearly 10 000 nurses revealed that 50% of participants reported feeling overwhelmed, and nearly 30% reported experiencing feelings of depression. Prior to the pandemic, nurses already suffered from poor sleep patterns, diet, and exercise habits with increasing trends of depression and suicide risks. These issues only got worse with the protracted COVID-19 crisis.

Reckoning of Racism

'As a black man and registered nurse, I am appalled by senseless acts of violence, injustice, and systemic racism and discrimination. Racism is a longstanding public health crisis that impacts both mental and physical health. The COVID-19 pandemic has exacerbated this crisis and added to the stress in the black community, which is experiencing higher rates of infection and deaths. At this critical time in our nation, nurses have a responsibility to use our voices to call for change. To remain silent is to be complicit.' ANA President Ernest Grant (ANA 2020c)

The public and brutal murder of George Floyd had sparked outrage across the country and fueled demands for collective reckoning with America's past of racism, social injustice, and police brutality against people of color. Racism has been hiding in plain sight in health care as nurses bear witness to the clear health disparities and disparate patient outcomes. The disproportionate impact of COVID-19 on people of color illuminated the real and often dire consequences of social and economic inequities directly connected to the social determinants of health and racism (Williams 2020). Eliminating racism and its prejudicial effects on health will require significant effort.

COVID's Social Stigma & Abuse

'I'm risking my own personal health, and then to be vilified just because of what I look like. I try not to think about that possibility when I'm at work taking care of patients. But it's always there, at the very back of my mind.' LL (Contrera 2020)

Nurses worried about their own safety and that of their families. Some stayed in hotels or slept in cars for fear of bringing the virus home. Nurses also suffered stigmatization and discrimination as fears of the virus, disinformation and lack of knowledge increased in the public. While nurses were being heralded as heroes, they suffered from involuntary social isolation and abuse from landlords, retail businesses, community members and in some cases, families. Nurses were falsely viewed as virus spreaders even as evidence showed that nurses had lower infection rates compared to the general public. The CDC warned that stigma arises from fear, a lack of knowledge about how COVID-19 spreads and the need to blame someone (CDC 2020b). The Trump Administration's labeling of COVID-19 as the 'China virus,' incited racial hostility against Asian Americans who represent 6% of the U.S. population but 18% of the country's physicians and 10% of its nurse practitioners. This hostility stoked fear and misinformation causing patients with COVID-19 to refuse to be treated by Asian-American professionals and subjected them to further personal abuse and harassment. (Jan 2020).

Economic downturn

The upheaval caused by the healthcare crisis spawned an immediate economic crisis. Preparations for patients with COVID-19 had devastating effects on health systems and healthcare workers including nurses. Revenue generating elective services such as operating rooms, cardiac catheterization and interventional radiology labs were shut down to preserve PPE and bed capacity. Reductions in revenue were met with an exponential increase in expenses for additional PPE, scarce equipment demanding soaring market prices and more staff in hot spots. To cut costs, many nurses were re-deployed or furloughed, and suffered pay reductions or even termination. The Foundation's Financial Impact Survey report findings of 10 000 nurses indicated 56% felt they were worse off financially as a result of the pandemic, and only 39% felt that there was no change to their finances. The survey further revealed that 42% delayed major purchases, 39% had resorted to using emergency funds and 32% were using credit cards to cover expenses (ANA 2020d). This study also found racial disparities with more black nurses using credit cards to pay their bills and providing financial help to family members.

COVID19 Policy, politics and practice

'This isn't about politics, choosing sides, this virus does not discriminate at all,' she said. 'It's taking lives from one end of the spectrum to another. I know it's wishful thinking but I just would love if we just had that common ground with fighting this virus.' (Ebrahimji 2020)

The failure to mandate national mask wearing has perhaps been the single most significant missed opportunity to control viral spread. Political leaders publicly argued about the value of wearing a mask and alignment of one's views on individual rights and society. Nurses tried valiantly to help educate the public about the lethality of this virus through social media, news reports and interviews, articles and even confronting anti-mask protesters.

Inadequate PPE, including the reuse of single-use respirators, threatened nurses' collective ability to adhere to standard infection prevention and control practices. Rapidly changing standards and information about the virus drove frequent changes to practices. Failure to adhere to the CDC guidelines led to higher rates of infections that overwhelmed hospitals in hot spots across the country. The need to expand into make-shift units and facilities operating under crisis standards of care, called for more staff including cross training of nurses from other specialties. The already fragile and strained public health infrastructure also struggled to mount the needed community response to the pandemic.

The American Nurses Association takes action

As news of COVID-19 unfolded globally ANA promptly developed a rapid response plan. Drawing upon lessons learned from prior public health threats and emergencies such as SARS, MERS, H1N1, and most recently Ebola, ANA crafted a plan centered on nurse safety, ethics, and advocacy that would also address preparedness in the future.

In early February, ANA stood up a COVID-19 web page as a one-stop resource to answer nurses' questions on many issues: identification, prevention, and mitigation of spread within healthcare facilities and the community; infection control measures for prompt identification and isolation of COVID-19 cases; and instructions for appropriate PPE donning and doffing. The site became ANA's COVID-19 Resource Center connecting nurses with key information pertaining to COVID-19 legislation, regulation, and advocacy; self-care, mental health and well-being; and data on issues affecting the nursing profession. ANA also launched a webinar series to address urgent educational needs.

Recognizing COVID-19's rapid spread and the growing need for additional resources, ANA partnered with the American Hospital Association urging Congress to pass legislation for supplemental emergency funding to support the public health infrastructure and urgent preparedness and response needs of health systems. The request also targeted financial support for healthcare organizations forced to shut down services, expansion of telehealth, and surveillance and testing. Congress passed multiple bills to address the economic

consequences of the pandemic for both individuals and health care organizations.

#GetMePPE

'I recently became positive for COVID. In my facility, it is policy to wear your N95 until you feel that it has been compromised. I feel as though that's too late. My last mask was worn for 5 days. In a positive room, drawing blood, my mask completely broke. While I was wearing a surgical mask over [it] and [a face] shield, I was completely compromised.'

ANA's initial COVID-19 survey conducted from March 20 to April 10, 2020 with over 32 000 respondents, revealed that 74% of nurses were extremely concerned about PPE, 58% were extremely concerned about personal safety, 62% were extremely concerned about adequate test kits and training, and 64% were concerned about the safety of friends and family (ANA 2020e). Yet, nurses continued to respond tirelessly. Retired nurses returned to the bedside, nurses left their home states and families to respond to the areas in critical need. At the end of their shifts, nurses walked away, sometimes to the sound of cheering and at other times choosing to self-isolate as a measure of protection of their own families.

ANA continued to advocate for the PPE needs of nurses. A grass roots social media campaign to initiate a call to action for Congress to increase PPE generated over 107 000 nurse advocates and over 330 000 messages to Congress. ANA also leveraged national media outlets through TV, radio, and print to raise awareness of the impact of COVID-19 on medical staff, patients, and families.

May 2020 was a pivotal month. COVID-19 fatalities jumped from 80 000 to 100 000 in less than three weeks' time (CDC 2020c). By the end of May, the CDC reported more than 62 000 doctors, nurses, and other health care providers on the frontlines of the US's COVID-19 crisis had been infected, and at least 291 died (Edwards 2020). By July, US COVID-19 cases surpassed 2 million and deaths reached 110 000 as lockdown restrictions were lifted. ANA continued its focus on PPE as shortages persisted as seen in Table 1. ANA's advocacy work continued with requests to address COVID-19 inequities, funding support for workforce development and aid, improvement of testing access, and a joint ask of the American Hospital Association, American Medical Association, and ANA for \$100 billion of direct funding for health care workers. In compelling testimony before the Senate Finance Committee, ANA President Ernest Grant leveraged findings from ANA's PPE surveys and the stories of nurses to insist on action to address the continued PPE shortage. ANA called on Congress and the Administration to

Table 1 PPE shortages (ANA 2020a, 2020b)

Category	May 2020	August 2020
Nurses required to reuse N95 masks	62%	68% (+6%)
Nurses reusing masks for 5+ days	43%	58% (+15%)
Nurses feel unsafe with reusing masks	59%	62% (+3%)
Nurses feel unsafe using decontaminated masks	53%	55% (+2%)

ensure a stable Strategic National Stockpile of PPE, medications, vaccines and critical supplies by improving inventory management and production to prevent future shortages.

Mental health and Well-being—A priority

Using a wartime reference, the COVID battlefield burns and our nurses are part of the wounded with mental and physical health warranting a high level of attention. ANA's Mental Health and Well-being survey revealed the impact of the pandemic on nurses' mental health and wellness, raising serious concerns. With half of nurses on the frontlines feeling emotionally overwhelmed and 29% feeling depressed, the need to step up support was evident (ANA 2020c). The Foundation launched the Coronavirus Response Fund for Nurses to enable the public to support and thank nurses. The Fund provides financial assistance, mental health and well-being support, the latest science-based guidance for protection and patient care, and national advocacy for nurses and patients. Millions of letters and expressions of gratitude as well as donations from individuals and corporations poured in to support nurses. The Foundation in partnership with ANA, the American Psychiatric Nurses Association, Emergency Nurses Association, and American Association of Critical Care Nurses implemented the Well-Being Initiative to support the near and long-term mental health and well-being of our nation's nurses. Through apps, narrative writing, peer support groups, and virtual counseling, the Well-Being Initiative created a 24/7 virtual support network for nurses.

Looking past the current horizon

In the midst of the world's pandemic, the US government gave formal notice to the United Nations of their withdrawal from the WHO to become effective July 6, 2021. This unprecedented and highly criticized move comes at a time when solidarity is essential. Director General Tedros Adhanom Ghebreyesus' words upon declaring the public health emergency were never more important when he advised, 'This

is the time for facts, not fear. This is the time for science, not rumors. This is the time for solidarity, not stigma.' (WHO 2020a).

COVID cases in the United States have surpassed 8 million with over 220 000 deaths and no curtailment in sight. The healthcare workforce is exhausted but continuing to serve the public. Nurses share universal experiences of unparalleled changes in practice, working conditions, personal stress and all too often personal loss.

Employers have a responsibility to ensure safe and empowering work environments that include appropriate staffing and conditions that prevent fatigue, as well as eliminate violence and discrimination. Addressing current and long-term mental health needs are essential to heal the current emotional wounds and ensure healthy and resilient nurses are there to care for patients in the future. Providing services for HCPs that promote their mental health, remove any stigma from seeking those help and actively support well-being and resilience is essential to maintaining a workforce that provides safe and effective care.

Nurses are on the front lines for a reason. They save lives. Nurses are asking to be fully engaged in developing and implementing a comprehensive coordinated public health strategy that ensure current and future protections.

The United States anxiously awaits the outcomes of the November elections. In addition to the Presidency, the Congressional outcomes may influence substantial change in health and social policies that impact the health of the American people and determine how successfully we manage the ongoing pandemic. In the future, we will reflect on this time as a testament to the power of the profession. Through innovation and advocacy, countless lives were saved despite the devastating losses. The future of the public's health will continue to rely on the voice and brilliance of nurses.

Author contributions

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Acquisition of data: PC, KBL, KM, CP

Analysis and interpretation of data: PC, KBL, KM, CP

Manuscript writing: PC, KBL, KM, CP

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