
Attaining the Quadruple Aim of Worker Well-Being in the COVID-19 Crisis: Competing Ethical Priorities

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Abstract

The COVID-19 pandemic presents ethical challenges to health care organizations and society as a whole regarding protection from a lethal communicable disease. In traditional medical ethics, we make an appeal to the duty of the professional to serve in the face of personal peril. At the same time, health care organizations are obligated to furnish protective equipment and provide a safe workplace in order to mitigate risk. The ethical calculus of utility, or greatest good for the greatest number, supplies some guidance in situations of scarce resources by sustaining as large a presence of front line workers through prevention or therapeutic intervention to combat disease. Determinations of utility do not absolve health care organizations of a duty to protect and avert future crises through better planning. A misguided pursuit of efficiency has resulted in excessive burden of risk for health workers providing direct patient care and for workers in supporting roles. There is an important duty to plan to lessen such risk in future pandemics.

Keywords: COVID-19, hospital, ethics

Introduction

The Iron Triangle of health care, access, quality, and low cost is a familiar concept to health finance practitioners and academics. Former Surgeon General C. Everett Koop famously said of the Triangle that the American people desire all three, but that of the components “you can have any two” (Koop, 1991). A missing element of the Triangle, also known as the “Triple Aim” was identified by Bodenheimer and Sinsky (2014) as worthy of equal recognition as an aspiration. In their formulation of the “Quadruple Aim”, they prioritize “adding the goal of improving the work life of health care providers, including clinicians and staff.” This aim was set in place well before the appearance of COVID-19 and the extraordinarily trying times for health care workers attempting to deal with a disease for which most organizations are not prepared.

COVID-19 and Health Care Workers

To be fair, the magnitude of the COVID-19 pandemic may be unprecedented in the last century in the United States with regard to risk to health care workers. In their review of American epidemics, Markel and Potts (2009) examined nine major epidemics, from cholera in 1892 through SARS in 2003. Based on these epidemics, they wrote that “given the remarkable arsenal of treatments, public health measures and rapid surveillance and communications ability, there’s never been a better time to have a pandemic than today- except, that is, tomorrow.” One might look at this statement as one of unwarranted optimism or cruel irony in light of the emergence of a contemporary pandemic.

The precedent of the Spanish Influenza of 1918 does provide some foreshadowing of the impact of disease on health care workers and other vital support personnel. Crosby (1989) documented the serious impact of influenza on health care providers in Philadelphia and San Francisco in 1918. He also pointed out the heavy toll on supportive service personnel of the time, such as telephone operators and sanitation workers. In the heavily impacted cities of the 1918 outbreak, the sudden appearance of the disease, and the often-confused responses, contributed to the peril faced by workers.

A heightened level of concern during the 1918 pandemic, and again today, is for the potential for infection of caregivers and essential employees in support roles, and their family members. The Centers for Disease Control and Prevention (2020) reported that as of April 15, 2020 that over 9,000 health care workers had tested positive for the virus. We also note significant regional variation, as one in five persons testing positive in Ohio is a health care worker (Farmer, 2020). This finding is undoubtedly influenced by the higher availability of tests for health care workers as compared to the general public.

The higher rate of infection in health care workers is reported even though they may possess certain defensive advantages unavailable to the general public. In theory, health care workers should have greater access to personal protective equipment (PPE) and should be more knowledgeable as a result of professional training in infection control. The more hazardous environment in which they work, with ill and contagious patients may mitigate these advantages.

Duty to Protect Health Care Workers

President Donald Trump has invoked the metaphor of war with regard to the COVID-19 pandemic (Stevens & Tan, 2020). If this metaphor is useful, what are its implications for societal obligations to critical health workers? In modern warfare practiced by industrialized societies, there is a consensus that a warfighter should be equipped with weaponry and protective gear in order to carry out her/his mission with maximum chance of personal survival. This is a relatively recent convention from an historical perspective. Drew Faust (2008), former Harvard President, has written that Civil War armies were typically recruited and privately equipped at the start of the war. Some recruits would enter battle with a pike (an elongated bayonet) rather than a rifle. As the war progressed, both armies rationalized supply chains equipped soldiers, until the industrial decline of the Confederacy.

Would better planning have avoided the current crisis? By contemporary standards, one would suggest that the achievement of mission would demand adequate equipment up to the standards of the time. Under this model, supplies would be made available preferentially to those in direct contact with the enemy – in our case, the virus. Paul Ramsey (1970) provides the example of provision of scarce resources in combat in discussing the Allied North African campaign of 1943. Penicillin was in short supply and Field Marshall Montgomery was presented the alternative of using the limited supply to treat war wounded or soldiers infected with venereal disease. It might seem obvious that the virtuous wounded would have received the life saving treatment. Yet Montgomery's choice was to treat the venereal disease group based on the need to return soldiers to the front line as quickly as possible. The overriding objective of defeating the Axis powers led to a starkly utilitarian conclusion.

Kass (2001) has identified a conflict of ethical principles as one of the key concepts in an ethical framework for public health. She writes that this ethical conflict “leave public health professionals to muddle through most ethics situations on their own, at worst, it would lead them, or even the public, to assume that public health is the branch of health care sanctioned by bioethics to make exceptions to existing ethics rules at will.” These exceptions are typically justified by an appeal to utility, which is popularly defined as “the greatest good for the greatest number (Darr, 2019). A crisis formulation of the problem leads to comparisons of benefits and burdens for affected persons, with the danger that such allocations may take place without regard to principles of doing no harm and of justice (Kass, 2001).

In the time of war metaphor, an ethical exception can be suggested during unexpected and unprecedented catastrophe. Even so, there are also steps to be taken by health care delivery organization for protection of their workers, in anticipation of such catastrophic occasions. Lacking available workers, delivery organizations will be impaired or completely prevented in the performance of their missions.

The Code of Ethics of the American College of Healthcare Executives, the professional membership organization for healthcare executives, stipulates certain obligations of its members. With regards to their workforces, the Code obligates the Executive to provide “a work environment that promotes the proper use of employees' knowledge and skills” (American College of Healthcare Executives, 2017). In a concluding statement, the Code obligates Executive to provide a “safe and healthy work environment.” Neither of these points are considered discretionary, with allowance for exception under extenuating conditions

The most apparent lapse with regard to assuring worker safety and well-being is the widely report shortage of PPE. In a National Academy of Medicine Report, Hick, et al. (2020) point out unusual measures regarding PPE that may be required in facilities with exceptionally high COVID-19 caseloads. While a minimally impacted facility might see a provider change PPE 20 times in a shift, those in high demand areas may have only one change available, or perhaps even less. High demand and short supply may necessitate a distribution of PPE to direct caregivers at the expense of support personnel, such as housekeepers and ventral sterile supply workers who also are exposed to pathogens.

Shortfalls in the protection of professionals and staff have been acknowledged in some delivery systems through relaxation of policies regarding worker presence on the job. The Carillion Clinic in Roanoke Virginia has relaxed its absenteeism policy in the face of employees requesting relief from duty for personal and family health concerns (Rife, 2020). Other efforts at mitigation of work force risk were reported at Mt. Sinai in New York City, as well as efforts by the American Nurses Association to assure the well-being of its members (Castellucci, 2020).

Health Care Workers' Unconditional Duty to Serve

The unfortunate fact remains that workers are subjected to elevated risk in the face of a poorly understood disease. As previously noted, this sense of peril extends to family members and others with whom the worker has contact away from the locus of care. Someone must continue to provide care in the face of these very rational fears. What are the ethical obligations of health care workers to do so?

The late Edmund Pellegrino, former President of Catholic University, argued forcefully that medicine and healing professions must be grounded in a philosophy of virtues (Pellegrino, 2002). These virtues include six key components. The first of these is fidelity to trust, so the patient may rely on the physician acting in her/his best interest. The second is benevolence, a classically cited obligation to do unto others, as you would have them do to you. This "Golden Rule" is a staple to ethical teaching in the world's principal religions (Smith, 2012). Intellectual honesty, compassion, and truthfulness are also cited as essential virtues. Finally, he cites courage as an essential virtue. He states specifically that "the physician must expose herself to the dangers of contagion." He also states, "It also takes courage to be the patient's advocate in a commercialized, industrialized system of care". He notes that this list is not exhaustive, and that other virtues exist as well.

The admonition of courage is reflected in codes of ethics of the various professions in healthcare. The Code of Medical Ethics of the American Medical Association (AMA) (2018) contains admonition against abandonment of a patient. Harkening back to an earlier epidemic, the Code also states that the physician may not ethically refuse care to a patient based on her/his HIV status (9.131). Physicians infected with a contagious disease are also to refrain from exposing patients to that condition (9.13), which is observed in the current COVID19 instance by removing infected workers to quarantine and treatment.

Bostick and colleagues (2008) have examined the ethical obligations of the physician in public health emergencies. In keeping with the ethical imperative to avoid patient abandonment, they write, "When faced with the possibility of personal harm, such as infection with communicable disease, physicians must arrange for continuity of care for their patients." The authors then continue with a prophetic statement, in which they state, "...the medical profession should advocate for availability of protective and preventive measures for physicians and others at risk. In turn, frontline physicians should utilize these measures to remain healthy and provide necessary medical services during epidemics."

The views of Pellegrino (2002), the AMA Code of Ethics (2018) as adopted by its Council on Ethical Affairs, and Bostick et al. (2008) invoke a model of duty to a voluntarily accepted standard

of responsibility. This higher level of duty reflects the notion of vocation, or calling from the Latin, in which professions accept higher standards of conduct in a contract with society for the privilege of autonomy (Friedson, 1970).

Not all physicians or professionals share in this opinion. Sandeep Jauhar (2020) acknowledges the duty driven obligations of physicians. He notes the American College of Physicians code of ethics imposes an ethical obligation to treat a patient that overrides risk to the treating physician. He questions the primacy of competing duties, noting, “We have obligations as professionals, but also as spouses, parents, and kids.” He concludes that health care workers will in the main continue to provide care in the face of personal risk.

Jauhar (2020) also invokes a reciprocal obligation of the part of society that he posits is owed to health care workers. He continues, “it would be a mistake for people to assume that our professional obligations are unconditional. An unconditional obligation would absolve society of its own responsibilities. And there are many.”

In keeping with the notion of reciprocal obligation, ten nurses were suspended at St. Johns of Santa Monica, a Providence Health System facility, for refusing to work without what constituted in their view adequate protective equipment (Karlman & Chabria, 2020). The dispute centers on the directive that nurses wear surgical masks rather than the more robust N-95 masks when treating COVID-19 patients. The Centers for Disease Control and Prevention has approved the use of such masks, but the practice has become controversial in deference to superior protective devices. A coworker contracting the COVID-19 infection heightened the dispute. The St. Johns policy stands in sharp contrast to the Carillion Clinic, whose approach of granting authorized leave in instances of refusal to work out of personal safety concerns.

Physicians and nurses have codes of ethics, as do the majority of health professions or semi-professions that are an essential element of their definition as professionals. This is often reinforced and normally recognized through the licensure process (Etzioni, 1969). It is important to note that many supporting personnel, such as housekeepers, transporters, and maintenance workers, may also be placed in situations of risk but do not subscribe to a professional code. Typically, they will be guided by a code of conduct developed by their employing organization as a condition of continued employment.

Emanuel, et al. (2020) suggest that the ethically superior solution to the general allocation of scarce medical resources would be a randomized process in which all are equally at risk. In their second recommendation they state that “Critical COVID-19 interventions—testing, PPE, ICU beds, ventilators, therapeutics and vaccines—should go first to front-line health care workers and others who care for ill patients and keep critical infrastructure operating, particularly workers who face a high risk of infection and whose training makes them difficult to replace. These workers should be given priority not because they are somehow more worthy, but because of their instrumental value: they are essential to pandemic response.”

The recommendation for an exception in the case of healthcare workers is in keeping with the utilitarian calculation of greatest good for the greatest number by maintaining the force of skilled

personnel. It may also be argued that support personnel in harms-way merit similar consideration, although they do not have highly technical and lengthy training.

The Emanuel et al. (2020) recommendations seems ethically pleasing as well from the vantage of virtue as well as utilitarian ethics, in which the contribution and sacrifice of those in peril is acknowledged and acted upon. Yet these recommendations have a curative character with the exceptions of PPE and testing. Is there a way to address the problem before curative interventions are necessary?

Prevention of Future Pandemics

The proverb attributed to Benjamin Franklin of “A stitch in time saves nine” certainly adds to Franklin’s reputation as a public health and healthcare visionary (Starr, 1982). In assessing the current crisis, Gostin, Friedman & Wetter (2020) wisely identify the value of “avoiding the scarcity dilemma altogether.” This might be accomplished through deployment of certain vital industries toward manufacture of essential protective equipment under the Defense Mobilization Act. This is a rational, but still late stage intervention in a current emergency.

In looking towards the future, one must look at the nation’s supply chain and its surprising frailty. In the pursuit of efficiency of operations at the supplier and health organization level, most firms have made a clear choice to value efficiency over redundancy. The allure of the “just in time” model of industrial efficiency has exposed a supply chain that is only as strong as its weakest links—of which there appear to be several (Culbertson, 2018).

None would argue that stringent inventory control and value based purchasing have not been economically beneficial. Yet when reliable supply chains are disrupted, as they are now, disruptions in an otherwise rational market occur rapidly and with force. Nicas (2020) chronicles the loss of reliable suppliers in the face of unprecedented demand for protective masks. In the place of reliable suppliers, emerge a variety of new entrants to the market, including many profiteers hoping to exploit surging demand.

Prior to the current pandemic, Nobel Laureate in Economics Joseph Stiglitz and colleagues argue for abandonment of traditional metrics that no longer reflect necessary elements for national economic health (Stiglitz, Fitoussi & Durand, 2019). They write, “if our measures tell us everything is fine when it really isn’t, we will be complacent.”

To cite the report of the National Academy of Medicine, there is a Duty to Plan that is both economic and ethical in nature (Hick, et al, 2020). It remains true that few foresaw the global spread and severity of the current pandemic. Yet the human and economic costs have been enormous, placing a duty on nations, manufacturers, and health care provider organizations to reduce risk of future harm as completely as humanly possible.

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