The Return of the Plague: A Primer on Pandemic Ethics

The needs of the many outweigh the needs of the few. . . Mr. Spock
—or the one. James T. Kirk
Star Trek, "Wrath of Khan"

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I am writing this editorial on a beautiful day in the high desert of the Southwest: a bright blue clear sky such as you see only in the mountain air, a sun warm and comforting, and birds singing as if they had not a care in the world. Spring has come early as if to dramatize the cognitive dissonance between this idyllic scene and a seemingly invincible winter of disease and death that has gripped the globe.

For now, my editorials will focus on the most threatening infectious disease outbreak since, perhaps, 1918. I have been teaching public health and pandemic ethics to health care professionals and trainees for more than a decade. I always tell the medical students, "it is not if but when" the next viral wave overwhelms society. It is human nature to disbelieve this inevitability and to ignore, dismiss, or even attack the infectious disease experts and science journalists who, like Cassandra, warn us of the return of the plague.[1]

In the early 2000s, virologists were concerned that Avian influenza with a mortality rate of > 60% would mutate into a virus capable of jumping the species barrier with sustained human transmission; however, that threat has not materialized (yet).[2] Instead, in 2009 the H1N1 influenza pandemic struck viciously. The always capricious genetic mutations of viral combinations outwitted vaccine manufacturers, offering little protection, resulting in an estimated 12,469 deaths, tragically many of them children, young, and middle-aged people.[3] In between, there were periodic eruptions of the deadly Ebola virus in Africa. In 2014, 11 Americans who had either served as health care workers or traveled in the region were treated in the US.[4]

This much abridged survey of recent pandemics reminds us of how wrong were those who returning victorious from World War II with newly developed antibiotics and at the zenith of American military medicine argued that we would also beat infectious disease.[5] As my Army pediatrician father would tell me, "the bugs will always be smarter than the drugs." For now, COVID-19 is outwitting those in science and medicine who are engaged in a desperate race to discover a vaccine or a drug to "stop the virus in its tracks" as the media is so fond of saying.[6] Irresponsible news outlets are giving a panicked citizenry false hope. Experts recently testified before the US House of Representatives that according to the most optimistic estimates, a vaccine is a year away.[7] Yet information is a double-edged sword, as the Internet also is able to communicate accurate lifesaving information from the Centers of Disease Control and Prevention and state health departments with unprecedented speed and reach.

The best chance for civilization to "flatten the curve" of the pandemic is, as it has been so many times before, through precautionary measures and preventive public health efforts. There is a reason that in 2007, readers of the prestigious *British Journal of Medicine* ranked public health interventions as the most important advances in medical history.[8]

The initial installment of this pandemic series will offer a primer in public health ethics. Just as almost everything else in daily life has rapidly and radically changed, so too public health ethics is significantly different in many important aspects from the clinical health ethics we are accustomed to in our practice. The first difference is focus. In clinical health ethics the focus of the individual health care practitioner is the individual patient, but public health ethics focuses on "what we as a society do to keep people healthy."[9] In a pandemic when decisions must be made (to paraphrase Mr. Spock) "for the good of the many" this creates an intrinsic ethical tension for the health care practitioner whose ethos is to advocate for his or her patient.

The second difference is that in order to accomplish these communitarian aims, the law and political and cultural factors have much more influence in medical decision making than within the ideal dyad of a health care practitioner and the patient engaged in shared decision making about the patient's health. This is nowhere more evident than in the President's recent declaration of a public health emergency. "The Federal Government, along with State and Local governments, has taken preventive and proactive measures to slow the spread of the virus and treat those affected. . ."[10] Federal and state governments can exercise wide-ranging powers that can restrict individual liberties in ways that would never be legal or ethically justifiable in the course of routine clinical care.

The third difference relates to the ethical principles that guide public health care decision making in comparison with those of clinical ethics. The primacy of autonomy in modern American medical ethics must for the health of the public sometimes yield to the overarching goal of preventing serious harm to the public and mitigating the transmission of the infection. Values such as nonmaleficence and justice become even more important than individual self-determination especially as the pandemic worsens and the demand for scarce ventilators and other life-saving resources outstrips the supply.[11]

The fourth difference is that in nonemergent care, whether in the clinic or the hospital, the health care provider bears the primary responsibility for making decisions. Practitioners bring their knowledge and experience and patients their values and preferences to arrive at a mutually acceptable treatment plan. In stark contrast the profound and tragic life and death decisions made in a pandemic should not be left to the individual clinician who to the degree possible should remain faithful to the individual patient's interests to preserve his or her professional integrity. Instead, decisions should be in the hands of highly trained and respected committees with diverse membership and expertise in accordance with evidence-based scientific protocols that are in response to changing pandemic conditions and the best available evidence. This process ensures that the values of consistency, transparency, and fairness which take center place in a public health emergency are the moral basis of decisions rather than ad hoc decisions that risk bias and inequity especially regarding vulnerable populations.[11]

There is one characteristic of medical decision making that does not change whether in a routine checkup or resource allocation in an intensive care unit in a pandemic: the need to respect individual human dignity and to show compassion for the suffering of those who will not survive. In the *Star Trek* episode "Wrath of Khan," Spock sacrificed himself to save his ship, his comrades, and his friends who mourned his death and honored his life.

Disclaimer

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