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Medical ethics and pandemic emergencies

La ética médica y las emergencias de pandemia

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Abstract

2018 is the 100th anniversary of an influenza epidemic that took the lives of between fifty and a hundred million people. Traditional medical ethics places the primary obligation of medical personnel on the care of individual patients. Yet in a time of pandemic emergency, the shear scope of demand for medical treatment may well make it impossible to meet both the public health needs of collective humanity and the collected needs of individual patients. Medical ethics must address this dilemma.

Keywords: Duty to populations; Influenza; Medical ethics; Pandemic; Public health

Resumen

Dos mil dieciocho es el centésimo aniversario de una epidemia de influenza que ha cobrado entre 50 y 100 millones de víctimas. La ética médica tradicional coloca la obligación primaria del personal médico en la atención de pacientes individuales. Sin embargo, en tiempos de

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emergencia de pandemia, el puro y simple ámbito de las demandas de tratamiento médico puede hacer imposible satisfacer al mismo tiempo las exigencias de salud pública de la humanidad entera y del conjunto de las necesidades de los pacientes individuales. La ética médica tiene que enfocar este dilema.

Palabras clave: Deberes hacia la población; Influenza; Ética médica; Pandemia; Salud pública

Introduction

One hundred years ago this year the human species endured the most deadly influenza attack in all history. People were not prepared for the onslaught of influenza in 1918. We are still not prepared for a global pandemic emergency of that level of virulence. My concern in the present paper is to note that the ethical preparation of the medical profession lags well behind the profession's clinical preparation.

While the death toll from the Bubonic Plague of the Middle Ages was higher as a percentage of the human population, the total number of deaths from the 1918 influenza (sometimes called "the Spanish Flu") was significantly higher. According to John Barry's book, *The Great Influenza*,

> The lowest estimate of the pandemic's worldwide death toll is twenty-one million, in a world with a population less than one-third of today's [2004]. That estimate comes from a contemporary study of disease and newspapers have often cited it since, but it is almost certainly wrong. Epidemiologists today estimate that influenza likely caused at least fifty million deaths worldwide, and possibly as many as one hundred million. (p. 4)

One of the reasons that the influenza spread so rapidly was that 1918 was a time of war. In all of the belligerent countries soldiers were transferred from training facility to training facility, from training facility to the battlefront in staggering numbers. At the same time, in the nations at war, news about the spread and virulence of the influenza was suppressed by national censorship regimes on the ground that bad news was likely to damage war morale. (Only in neutral Spain was there open media

coverage of the influenza, and hence the influenza, which actually started in Kansas in the United States, came to be known as the "Spanish Flu." (Barry, p. 171)) Yet the movement of people from place to place in 2018 is, if anything, more rapid and less constrained than it was in 1918.

Much has changed, of course, since 1918. In 1918 modern medicine was in its relative infancy. The germ theory of disease had only been generally accepted for about fifty years. As a corollary, consistent attention to antisepsis in medical treatment was likewise only about fifty years old. It had been only about forty years that even the best medical schools required any significant study of science. In the United States, as late as 1910 the Flexner Report, *Medical Education in the United State and Canada*, concluded that "more than 120 of the 150-plus medical schools in operation should be closed." (Barry, p. 84) Yet there were in 1918, both in Europe and the United States, hospitals and laboratories working full bore on developing vaccines.

Medical ethics

The medical profession has a long history of attention to the ethical requirements of its practice. By tradition, attention to the ethics of medical practice dates back at least to Hippocrates in the late fifth century BCE. Medical practice in ancient Greece differed dramatically from the modern medical practice of the twentieth century. The ancient Hippocratic Oath's ban on using "the knife," for example, could not be carried into modern medical practice. Thus the ancient oath was largely abandoned by the 1870s, and a modern version of the oath was written in 1964 by Dr. Louis Lasagna of the Tufts University School of Medicine.

The American Medical Association was organized in 1847 and immediately recognized the need for some form of Code of Ethics. The Code has been periodically revised since 1903, most recently in 2016. The World Medical Association was founded in 1947. It adopted an "International Code of Medical Ethics" in 1949, revised most recently in 2006. The "International Code of Medical Ethics" adopts a very standard format, focusing on "Duties of Physicians in General," "Duties of Physicians to Patients," and "Duties of Physicians to Colleagues," although the World Health Organization has also adopted the "International Health Regulations," which addresses the prevention and control of global pandemics.

The AMA Code centers around the 2001 "AMA Principles of Medical Ethics." Three of the AMA principles make the ethical problems facing the medical profession in the context of a pandemic emergency clear:

> "VI. A physician shall, in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve, with whom to associate, and the environment in which to provide medical care.
>
> VII. A physician shall recognize a responsibility to participate in activities contributing to the improvement of the community and the betterment of public health.
>
> VIII. A physician shall, while caring for a patient, regard responsibility to the patient as paramount." (AMA)

Each of Principles VI, VII, and VIII, states an appropriate moral demand on the physician and the medical profession. There is, however, a kind of unexpressed tension among the principles. Principle VI speaks generally about questions about whom, when, and where to serve. It does, however, acknowledge that "emergencies" may place the physician under different obligations from the ordinary run of events. Physicians are most likely to see this as applying to situations in which a physician encounters a situation where someone is in need of immediate help and the physician or physicians at hand must provide care. However pandemics present a different kind of emergency that must alter the ethical standards of medical practice for a different set of reasons.

Principle VII is the one place in the "AMA Principles" where responsibility to public health arises explicitly, and here only in a very general statement. Principle VIII is the principle that creates the real problem in the context of pandemic emergencies. It states that the physician's responsibility "while caring for a patient" is to the patient. In anything close to normal practice, this is absolutely as it should be.

As is reflected in Principle VIII and generally in the International Code, the standard framing of issues in medical ethics tends to focus almost exclusively on the relationship between a physician and a patient. The complexity of contemporary health care delivery, of course, complicates the issue in a variety of ways involving hospitals, insurance companies, national health systems, etc. More fundamental com-

plications arise, however, in the context of public health emergencies. The various codes of medical ethics focus very little on public health. However, in addition to the AMA's Principle VII, the World Health Organization has promoted the "International Health Regulations," adopted as binding by 194 countries.

The purpose and scope of these Regulations are to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade. ("International health regulations," p. 10.)

While the regulations say much that is useful about control of transmission and about immunization and prophylaxis, the Regulations provide little concrete guidance to the physician in clinical settings.

The issue of public health emergencies

Given the standard focus of medical ethics codes and, as a corollary, of the ethical perspective of most people involved with heath care delivery, public health emergencies create a major challenge. One of the most basic principles of ethics is the "ought implies can" principle. People can be obligated to provide only what they are able to provide. In such events as pandemic influenzas, the collective individual need for various forms of treatment may well vastly exceed the availability of such forms of treatments. For example, estimates given in the Delaware Department of Health and Social Services Division of Public Health's "Delaware Pandemic Influenza Plan" project that an influenza outbreak on the scale of the 1918 "Spanish Flu" would involve 90 million cases of the influenza in the United States. Of those 90 million cases, 45 million would require outpatient treatment. 865,000–9,900,000 people would require hospitalization, and 209,000–1,903,000 people would die. (Delaware, p. 5) At the same time, the U.S. Center for Disease Control counts just over 951,000 hospital beds available in the United States in 2008 for all cases of medical treatment requiring hospitalization. (https://www.cdc.gov/nchs/data/hus/2010/113.pdf.) The problem is obvious. A pandemic emergency of scale comparable to the 1918 influenza would lead to a demand simply for hospital beds, to say nothing of other medical resources, that exceeds the available supply by a huge margin. Lest we think that there is any easy solution in simply constructing hospital space to serve another five to nine million patients, we must remember that the resources required

for that purpose would be, at least in large part, resources not spent satisfying other fundamental human needs.

The sobering facts about the potential demands placed on health care delivery systems by a global pandemic emergency force us to think carefully about what Human Rights standards actually require. The Constitution of the World Health Organization states that "the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being." It is essential to note that "the highest attainable standard of health" must be relative to concrete circumstances, with the recognition that some circumstances are within human control and some are not. Changing circumstances so as to increase the availability of prenatal care in various areas of the world is surely something that is to a significant degree within human control. Stopping the global spread of a novel form of virulent influenza virus, by contract, is to a large degree beyond human control. Given this, the concrete forms of treatment that the right to "the highest attainable standard of health" may entitle "every human being" in time of what we might call normal health care challenges should be expected to be quite different from the concrete forms of treatment that the same right entitles "every human being" in times of pandemic emergencies.

The 2009 H1N1 influenza outbreak certainly generated important attention to these issues. Two fundamental challenges arise as we look to future influenza pandemics which almost certainly await us at some point in the future. First, governmental agencies must move beyond innocuous generalities. In particular, governmental officials must be prepared to declare "States of Emergency" in a timely manner, as such proclamations provide both direction and protection for all those who are in the practical business of providing care.

The second and most difficult challenge is for medical schools, medical societies, and other institutions to lead their students and members to think of ethics in ways that are able to move beyond the traditional individual physician/individual patient paradigm. In speaking of the problem of providing medical care to the civilian population in the United States in the 1918 influenza pandemic, Barry notes, "[t]he virus was penetrating everywhere, doctors were needed everywhere, and no responsible doctor would abandon his (or, in a few instances, her) own patients in need, in desperate need." (Barry, p. 318.) In anything like normal times this refusal to "abandon his . . . or her . . . patients in need" is laudable. Most physicians regard it as the first moral command of medical practice. The problem is that in pandemic emergencies it may well be wrong.

In normal times, in normal medical practice, patients are the primary responsibility of the physician. In pandemic emergencies, where the onslaught of disease vastly outstrips the available resources, the primary responsibility of the physician is, arguably, not patients, but populations. The physician who sees it as his or her primary responsibility to get his or her patients access to the available resources may well work against the more important demand that the available resources be allocated in whatever manner will best preserve the human community. Use of resources to serve the particular physician's particular patient may well divert resources from their most efficient uses. Additionally, the standard practice of physicians focusing resources available to them first and foremost on their patients is simply not sustainable across the profession in such a pandemic emergency. In the language of traditional moral philosophy, it is not "universalizable" because of the level of supply would not allow physicians to satisfy the overwhelming demand.

This kind of utilitarian calculus is generally regarded as abhorrent in the context of normal medical practice. The dilemma is well reflected in the voluminous philosophical literature on the Trolley Problem. Yet pandemic emergencies are not normal. The fact that we look back a century for our most dramatic example tells us that such emergencies are anything but normal. Accordingly, it should not surprise us that the ethical demands on physicians in such emergencies are themselves anything but normal.

Conflicts of interest

The author has no conflicts of interest to declare

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