

Bioethics in Practice

A Quarterly Column About Medical Ethics

Ebola and Medical Ethics – Ethical Challenges in the Management of Contagious Infectious Diseases

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On September 30, 2014, the Centers for Disease Control and Prevention confirmed the first diagnosed case of Ebola virus disease (EVD) in the United States in Dallas, TX. In the wake of the subsequent Ebola scare, the American healthcare profession and the government responded with the development of rigorous protocols and guidelines for healthcare providers treating patients diagnosed with or suspected of having EVD.

Because no approved vaccines or therapies are available to treat EVD, the disease has a 90% case fatality rate in West Africa, comparable to the US case fatality rate for human immunodeficiency virus (HIV) infection in the mid-1980s. Because of the availability of critical care medicine and experimental therapies in the United States, however, the US case fatality rate for EVD has been less than 20%. Not since the outbreak of severe acute respiratory syndrome (SARS) in 2003 has the North American medical profession encountered an infection with such a high mortality rate and high risk of infection for healthcare workers. This article discusses several of the ethical challenges healthcare workers encounter when considering the safest and most effective means to evaluate and treat patients with suspected or proven EVD. The issues raised here are not meant to be all-inclusive but rather a springboard for further discussion and debate.

ETHICAL PRINCIPLES OF MEDICINE

Ethical principles are fundamental to medicine. These principles are expressed in ethical codes such as the Hippocratic Oath, the Code of Medical Ethics by the American Medical Association (AMA), and the Ethics Manual of the American College of Physicians.

Respect for Persons

Respect for autonomy is one of the fundamental principles of clinical ethics. Autonomy in medicine is not simply allowing patients to make their own decisions. Physicians have an obligation to create the conditions necessary for autonomous choice, including ensuring patient confidentiality and obtaining informed consent. While the physician's primary duty in clinical medicine is to promote the well-being of individual patients, public health ethics differs from clinical ethics by giving priority to promoting the public good over protecting individual autonomy.

Duty to Do Good and Avoid Harm

Inherent in most medical codes of ethics is the duty to care for patients and to relieve patient suffering. The principle of beneficence can be considered to be the doctor's duty to put the patient's interest before his or her own interests. Nonmaleficence, the duty to do no harm to patients, counterbalances the principle of beneficence. Harm to patients can occur with some forms of medical intervention whether the intervention is beneficial to a patient or not.

Fairness

The equal distribution of medical resources—including therapies—without prejudice or discrimination is the principle of distributive justice. In the case of infection with a contagion, such as the Ebola virus, this principle requires the fair distribution of medical resources, including equal access to prevention, assessment, and treatment.

These are the main ethical principles that can be applied to any discussion about the management of an infectious disease outbreak. Consider these

principles in the context of contagious infectious disease clinical scenarios such as those encountered in an EVD outbreak.

ETHICAL CHALLENGES RELATED TO EVD

Duty to Treat

What are the obligations of healthcare professionals to care for patients infected with the Ebola virus? Caring for patients with EVD has, and will, endanger healthcare providers. Is there guidance for this obligation? What about in the case of an outbreak? Do health professionals have a duty to provide care to patients with a deadly infectious disease if a substantial risk to themselves and their families exists?

The Hippocratic Oath is silent on whether physicians are obliged to care for the sick. The AMA Code of Medical Ethics states, “A duty to serve overrides autonomy rights in societal emergencies, even in cases that involve personal risks to physicians.” Nonetheless, many healthcare providers, including physicians, have opted not to care for patients infected with the Ebola virus because they fear contracting the virus and possibly spreading the infection to family members. Arguably, physicians who have chosen a specialty that inherently carries a higher risk of acquiring an infectious disease may have accepted this duty (and risk) through their choice of specialty. However, this duty depends on reciprocal obligations of governments, healthcare institutions, and other relevant bodies and agencies to provide appropriate protective measures to reduce the risk of transmission to healthcare providers. The obligations of governments and societies to physicians are comparable to the obligations of physicians to their patients.

Volunteerism is an appropriate means for healthcare providers to serve those infected with the Ebola virus. However, it is uncertain how care is to be provided to the sick if patient demand surpasses volunteer capacity, such as in a pandemic event.

Quarantine vs Autonomy

Patients infected with the Ebola virus pose a public health risk. Because isolation and quarantine are two public health measures utilized to reduce or eliminate that risk, patients infected with the Ebola virus have limited autonomy. Additionally, infected patients may not voluntarily leave an isolation facility against medical advice, request specific healthcare providers, or transfer to another facility. Nonetheless, there is uncertainty about how to use isolation and quarantine for asymptomatic healthcare providers such as those under surveillance for possible Ebola virus exposure. Finally, the impact of forced quarantine of returning asymptomatic healthcare providers on future volunteerism, such as the effect a reduction

in healthcare volunteers would have on the EVD epidemic, is unknown.

Limiting Treatments

The use of invasive and life-sustaining therapies in the management of EVD has been debated in recent literature. Given that several US EVD survivors were beneficiaries of mechanical ventilation and dialysis, it is ethically inappropriate to establish general policies against the use of these technologies in all clinical situations. When experienced personnel perform invasive treatments electively and in a controlled environment, the risk of transmission should be minimized. However, if a patient is arresting and dying from EVD, emergent endotracheal intubation and chest compressions are unlikely to result in a survival benefit and probably should not be performed. The healthcare providers managing patients with EVD must weigh the benefits and risks associated with each intervention and should decide whether to use these treatments on a case-by-case basis.

Use of Unapproved or Experimental Therapies

Several of the Americans infected with the Ebola virus in West Africa were airlifted to the United States and were treated with optimum medical care, including experimental therapies that had never been tested in humans. Ethical questions followed these actions that some might describe as extraordinary treatment. Is it ethical to test experimental therapies on humans outside of a clinical trial? When administered to a patient with a high likelihood of death, is experimental treatment more acceptable? A recently convened World Health Organization panel issued the opinion that offering unproven interventions with unknown efficacies and adverse effects is ethical under certain conditions. A final ethical consideration is why should some individuals get access to experimental therapies when others dying of EVD in West Africa do not?

CONCLUSION

During the past century, we have learned many things from the public health response to infectious diseases, including the use of airborne precautions to prevent the transmission of tuberculosis and the use of universal precautions to prevent healthcare-acquired HIV infection. As important, we have also learned—whether dealing with tuberculosis, HIV, SARS, H1N1 influenza, or EVD—that our efforts to prevent, control, and treat infectious diseases raise important ethical issues. We must continue discussing and debating these issues so we may develop and improve protective measures and policies before the next epidemic occurs, whether it is due to EVD or another contagion.

SELECTED READINGS

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