

April 2015

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Recommended Citation

Nowell, Robert (2015) "Must US Medical Professionals Treat Ebola Patients?," *Pursuit - The Journal of Undergraduate Research at The University of Tennessee*: Vol. 6 : Iss. 1 , Article 20.

<https://doi.org/10.7290/pur6dojn>

Available at: <https://trace.tennessee.edu/pursuit/vol6/iss1/20>

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Must US Medical Professionals Treat Ebola Patients?

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In this paper, I examine the duty of US healthcare providers (HCPs) to treat patients in the context of the current Ebola virus disease (EVD) outbreak. In particular, I consider how EVD and subsequent treatment is different from other infectious diseases like influenza or SARS, and how this impacts duty of care for US HCPs. I conclude that, given proper protective measures and support, HCPs at present face a strong moral obligation to care for patients with EVD. This duty is dependent upon individual position and context, and it may change if, for example, the situation turns into a pandemic.



Morbidity

According to figures from the World Health Organization (WHO), in 2003 morbidity of Severe Acute Respiratory Disorder (SARS) was 3.9%.¹ The Occupational Safety and Health Administration (OSHA) cites the morbidity of SARS as being between 6 and 9 percent.² The annual rate of influenza-associated death in the United States between 1986 and 2003 ranged from 1.4 to 16.7 deaths per 100,000 persons, a morbidity of less than .02%.³

Regarding EVD, “the case fatality proportion among patients in West Africa with a known outcome is about 71% (ranges from 46% in Nigeria to 69%-72% in Guinea, Liberia, and Sierra Leone).”⁴ As such, EVD today has a significantly higher morbidity than SARS or influenza. However, there is reason to believe that the morbidity of EVD in a controlled US healthcare setting would be significantly lower than in West Africa, given widespread availability of quality medical support. Of the three patients to be treated for EVD in the United States, one died.⁵ With proper care, EVD may be substantially less deadly.

Transmission

Influenza is transmissible through airborne droplets and “is so infectious that it once infected every passenger on an airplane after one of them was shedding virus via coughing and sneezing.”⁶ SARS is primarily transmitted via respiratory droplets. A patient must exhibit symptoms in order to spread the virus, and transmission is most often “attributed to short-range contact with infected respiratory droplets; however, transmission through sewage, feces, food, water and air are other possibilities.”⁷

EVD cannot be transmitted causally or through the air like influenza or SARS. Instead, transmission of EVD requires contact with infected bodily fluids, and people with EVD cannot spread the virus until symptoms appear.^{8,9} That is, EVD is less easily transmitted than SARS or influenza.¹⁰ Klugman (2014) states the following:

The infection rate in West Africa is high because (a) a shortage of trained health professions and medical supplies means caregivers lack adequate personal protection and can then act as disease vectors; (b) poorly funded public health systems means it's hard to respond to the disease; and (c) the funerary rites in many of these places include touching the deceased, washing the body, and even kissing the body.

The infection rate in the United States, with proper safety measures, will very likely be less than the infection rate in West Africa due to a variety of differences between the healthcare settings.

Treatment and Personal Protective Equipment

Without any Food and Drug Administration (FDA) approved vaccines for prevention or treatment for EVD, clinical management focuses on support for complications. “Recommended care includes volume repletion, maintenance of blood pressure (with vasopressors if needed), and maintenance of oxygenation, pain control, nutritional support, as well as treating secondary bacterial infections and pre-existing comorbidities.”¹¹

Recommended personal protective equipment (PPE) for influenza¹², SARS,¹³ and EVD¹⁴ are nearly identical. Concerning EVD, the Centers for Disease Control (CDC) recommend specifically that HCPs receive thorough training on use of equipment, that proper areas are specified for donning and doffing PPE, and that a trained observer is present at all times to ensure that step-by-step donning and doffing protocol are followed.¹⁵ The CDC states that “healthcare workers caring for Ebola patients should have no skin exposed.”¹⁶

In summary, the morbidity of EVD in the US may be significantly less than measured morbidity in West Africa, though it is still greater than influenza or SARS. The transmission process of EVD is substantially less virulent compared to influenza or SARS, and the infection rate is likely to be significantly lower in the United States where best practices for PPE and HCP safety are in place and strictly monitored. I therefore conclude that HCPs face a similar or greater duty of care in the case of EVD as in the cases of influenza or SARS.

Some have disagreed with this conclusion. Stephen Post (2014) describes the risks of EVD as “very high,” given that nearly 20 percent of HCPs working with EVD patients in West Africa contracted the disease. The majority of cases are caused by poor handling of PPE, which is likely to be closely monitored in the US. “All it takes to become infected is to touch the outside of a gown or goggles and then touch one’s eyes, nose, mouth, or scratch.”¹⁷ In addition, the propensity of American doctors toward overtreatment may increase the risks of infection.

Many of these issues can be solved by following best practices to prevent contamination and disease transmission. Therefore, I adopt as a premise that, if HCPs face a duty of care with respect to influenza or SARS, then they face a similar duty of care with respect to EVD.

I next consider what duty of care HCPs face with respect to infectious disease emergencies. Most of the discussion to this point has focused on diseases other than EVD, so I will consider what is the accepted duty of care for influenza and SARS. Given the considerations above, understanding US HCP duty of care for influenza and SARS will shed light on what obligation HCPs face to treat patients with EVD.

Prima Facie Duty

If we consider basic principles of the medical profession, it is not difficult to conclude that physicians and other HCPs face a *prima facie* duty to treat patients who are sick with virulent infectious diseases like EVD. Louis Lasagna’s modern Hippocratic oath (1960) is a first resource: “I will apply, for the benefit of the sick, all measures [that] are required.” At the outset, the situation is simple: Doctors are obligated to treat patients.

Qualifying the four major principles of the medical profession, Beauchamp and Childress (2007) write the following: beneficence “refers to a moral obligation to act for the benefit of others. No demand is more important when taking care of patients: the welfare of patients is medicine’s context and justification.” For a medical professional, no moral obligation supersedes her obligation to commit herself to the welfare of patients; this is medicine’s “context and justification.” When patients are sick, an HCP faces a moral responsibility to contribute to their welfare.

Discussing the virtues of a good physician, Edmund Pellegrino (2000) states that the relationship between a physician and a patient is “a covenant of trust, a special kind of promise to serve those who require her expertise. Suppression of self-interest to some degree would be a natural corollary of a virtue-oriented physician.” Physicians recognize the commitment of their profession to treat the sick, even at the potential expense of their own self-interest.

Actual Duty

While a *prima facie* duty for HCPs to treat sick patients is uncontroversial, the question of whether physicians and other HCPs have an actual duty of care toward patients with EVD in the US remains unclear.

Clark (2005) presents three reasons that support an HCP’s special obligation to treat during an epidemic: (i) HCPs have a unique *ability* to treat patients; (ii) HCPs have *assumed risk* by pursuing careers devoted to treatment of the sick; and (iii) there is an implicit social

contract between members of the health professions and society.

Only healthcare professionals have the ability to treat patients who need help during an epidemic. Firefighters or computer scientists cannot step in to take their places without training to become HCPs themselves. Moreover, just as a firefighter assumes the risk of entering burning buildings, an HCP assumes some risks associated with treating patients who are in need of treatment. Finally, a kind of social contract exists between society and the health professions which obligates the HCP to help treat patients in an epidemic when needed.

In line with these considerations, I conclude that HCPs face an actual duty of care in the face of epidemics such as influenza, SARS, or EVD. But what does this duty of care look like? One may wonder what precisely is expected of HCPs in the face of an epidemic.

What does this duty of care look like for EVD?

In the past, HCP expectations were at times robust and specific. The 1922 code of ethics for the Canadian Medical Association (CMA) reads that “when pestilence prevails, it is [the physicians’] duty to face the danger, and to continue their labours for the alleviation of suffering, even at the jeopardy of their own lives.”¹⁸ This version of the CMA code of ethics followed the influenza pandemic of the late 1910s. The original American Medical Association (AMA) Code of Ethics, written in 1847, states that “it is their duty to face the danger, and to continue their labours for the alleviation of the suffering, even at the jeopardy of their own lives.” Neither of these stringent codifications of a duty of care remain in the present day.¹⁹

Today, some duty of care is recognized in the United States, but present expectations in the US are vague and insufficient as practicable guidelines. The following is an excerpt from the current AMA Code of Medical Ethics:

Because of their commitment to care for the sick and injured, individual physicians have an obligation to provide urgent medical care during disasters. This ethical obligation holds even in the face of greater than usual risks to their own safety, health or life... however... physicians should balance immediate benefits to individual patients with ability to care for patients in the future.²⁰

Ruderman et al. (2006) highlight the difficult ambiguity of this codification of HCP duty of care. The present AMA codification lacks much substance; it fails to clarify *which* HCPs face this obligation, how emergency situations should be managed, or what consequences may be faced when HCPs refuse to treat patients. Ruderman et al. posit that it is imperative that specific duties and expectations be codified in order to “dispel confusion and uncertainty” for healthcare professionals and the public.

In the face of ambiguity in the AMA code, what is to be concluded about the specific duty of care for US HCPs with respect to EVD? Davies and Shaul (2010) provide a helpful foundation for this duty through their examination of the legal duties of Canadian HCPs to treat patients in disaster situations. In almost all provinces, provincial governments have the capacity to require service from HCPs except when HCPs “reasonably” and “honestly” believe that circumstances pose a serious and immediate, unacceptable risk to their health and communicate this with their supervisors. An unacceptable hazard involves risks that are neither (i) inherent to the occupation of the worker nor (ii) part of the normal working conditions. This definition of a duty of care specifically identifies the situations when an HCP can refuse to treat patients. Only when circumstances are sufficiently extraordinary that the mandated actions of the HCP involve serious and immediate dangers that exceed normal working conditions and are not inherent to the occupation of the worker. This account leaves room for interpretation, but the general responsibilities of HCPs are clear.

An argument in line with Sokol (2006) might dispute this obligation. Grounded in

Pelligrino and Thomasma's account of patient virtues in *For the Patient's Good* (1988), Sokol posits that patients must be tolerant of the duress imposed by a serious epidemic and thereby "allow [HCPs] to step down from their role as caregivers.... Patients should be entitled to ask for a replacement... but they cannot force other persons to undergo extreme stress against their wishes" (1239). It is no stretch to call EVD a serious threat. Moreover, these considerations might reasonably convince an HCP that the risk is too great. I am not, however, convinced that the risk exceeds standards of acceptable HCP risk in most situations, as long as safety measures are in place. In recognition of the significant risk posed to HCPs, I echo Dwyer and Tsai (2008) in calling for adequate social support of HCPs treating patients in the context of an epidemic.

Sokol (2006) further posits that, while medical professionals may be justified in leaving their patients in extreme cases, such action will inevitably lead to deteriorated public trust in medical professionals. I agree, and in today's social media driven information age, even one ethical misstep by a physician going "viral" could have a widespread and lasting impact on the profession.

I therefore argue that, from these guidelines, US HCPs face a strong duty of care in the case of EVD as long as safety precautions remain in place. The risk faced by physicians treating patients with EVD in the United States is not an unacceptable hazard so long as proper PPE and support are available. The risk presented to a medical professional in full recommended PPE by non-airborne EVD does not exceed risks inherent to the medical profession. If step-by-step guidelines and recommendations for HCP safety are followed, the medical professionals do not face an unacceptable hazard.

For whom does this duty apply?

Frader and Ross (2014) raise the question of whom specifically ought to take on the risk of treating patients of a virulent epidemic. In particular, they consider whether medical students or residents face a duty of care with regard to EVD patients. They further conclude that medical students do not face a duty of care, while residents do. They reach this conclusion based on the amount of relevant clinical experience these HCPs have. Medical students will most likely not have sufficient training, but residents have a similar level of training to many other HCPs, such as emergency medical services personnel or nursing staff.²¹

Davies and Shaul (2010) argue that an HCP's duty of care is in part dependent upon whether or not her refusal to give care will endanger patients. A duty is stronger when, for instance, no other HCP could take care of an HCP's patients. This entails that a duty of care may often be greater in rural health settings compared to major cities.

In the past, the risks of an epidemic have been primarily borne by supportive medical staff, particularly nurses. In SARS, for example, the distribution of risk was such that nurses and residents were at great risk, particularly at public hospitals.²² Dwyer and Tsai (2008) recommend that risk is more equitably distributed in future epidemics. In order for this to take place, they maintain that normal healthcare arrangements may need to be shaken up to some extent, potentially involving shuffling staff and patients among equipped hospitals in order to guarantee a fair distribution of risk among staff.

Limitations to this duty

It is important to recognize that this duty is not absolute. It is conditioned on, for instance, the availability of proper PPE, adequate healthcare facilities, and various other factors that affect the susceptibility of HCPs to risk of infection. A situation where PPE is no longer available -- as is possible in a serious outbreak or pandemic, for example -- may present an

unacceptable risk for a reasonable HCP. The duty of US HCPs to treat patients with EVD argued for in this paper is contingent upon conditions that do not present unacceptable risks to HCPs, and alterations in these conditions would require a reevaluation of HCP responsibility to treat contagious patients.

In conclusion, when compared with influenza or SARS, HCPs face a similar or greater duty of care with respect to EVD, and this duty is founded in the ability, professional assumption of risk, and implicit social contracts of HCPs. Present codification of this duty is vague, and so I argue that this duty comes through as a duty to care for patients unless a serious and immediate, unacceptable risk is faced by HCPs. In the case of EVD, this means that HCPs ought to treat patients as long as proper PPE and safety practices are in place.

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