Ebola—A Crisis

Jan Odom-Forren, PhD, RN, CPAN, FAAN

I ACTUALLY HAD A DIFFERENT editorial in mind for this back page. But the impending seriousness of the Ebola crisis would seem to be much a more important topic. By the time you read this, I am hoping that we only had the 3 Ebola infections that have presently occurred within the US. I think all of us paused when Mr. Duncan was admitted to a Dallas hospital, but then when one of the nurses who provided his care was diagnosed with Ebola, we stopped in our tracks. And we have been further shocked by news of a second health care worker diagnosed with the virus.

We are globally connected as never before. And we have hindsight in our favor. But most experts now agree that the world should have taken more notice when the newest outbreak in West Africa began. Because these countries had limited resources to combat a deadly disease, we should have responded to this 2014 Ebola outbreak as quickly as possible with supplies, people, and financial aid. With the continuing crisis, fortunately we are now seeing mobilization of aid—but there are questions as to whether it is enough.

What are some facts about Ebola? 1

- Ebola virus disease (EVD) is a severe, often fatal illness in humans.
- The virus spreads in the human population through human-to-human transmission. Past epidemics have been stopped with proper isolation techniques.
- The fatality rate is about 50% ranging from 25 to 90%. The current epidemic in West Africa has a 70% fatality rate.

Preparation

As a country, the United States seemed to be unprepared for an outbreak within our borders. We do have outstanding facilities in Nebraska, Georgia, Montana, and the National Institutes for Health (NIH) in Bethesda, MD, who have prepared for years to address bioterrorism. Patients seem to have been cared for at these facilities without harm to the health care providers. This was not the case in Texas where a 26-year-old nurse was recently diagnosed with Ebola after caring for a patient with Ebola. At this point, no one knows for certain how she contracted the disease. And then a second health care worker was diagnosed.

What has been pointed out in numerous blogs over the past couple of days is how cumbersome the process for body protection actually is. Check out the CDC poster (http://www.cdc.gov/vhf/ebola/pdf/ppe-poster.pdf) or the 2007 guideline for isolation precautions (http://www.cdc.gov/hicpac/2007IP/2007ip_part2.html#e). As nurses, we know the basics of isolation techniques. For those of us in the perianesthesia setting, the most common area we see with strict sterile precautions has been in the operating room. There, touching one’s face simply means the circulating nurse tells you step back and replace your gear because you have contaminated your gloves and/or your gown. It doesn’t mean a possible death sentence for the health care worker. But it does point out the complex issue of following protocols strictly 100% of the time without fail.

What do we need to do? Globally, we need to address the crisis in West Africa. Specifically, we need to have clear policies and procedures for care of the Ebola patient. As Sarah Kliffe

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8. The ideas or opinions expressed in this editorial are those solely of the author and do not necessarily reflect the opinions of ASPAN, the Journal, or the Publisher.
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points out in her blog (http://www.vox.com/2014/10/13/6968775/ebola-nurse-united-states-texas-directions-protocol-breach), Ebola treatment protocols are complicated. The CDC checklist is 21 items long with multiple steps and, in many cases, the health care worker has to make a decision as to how to proceed. There should not be a health care facility, hospital, or ambulatory facility that does not have clear policies and protocols. And nurses should be at the table when those protocols are written. These facilities also have the obligation to educate employees and the community as to signs and symptoms of Ebola as well as provide the necessary training for use of personal protective equipment (PPE) for employees. There has been speculation that the nurse in Texas and nursing assistant in Spain may have been infected when removing PPE. Cohn suggests that every facility with Ebola patients should adopt the practices of groups like Doctors Without Borders who have thorough checklists and also use a buddy system to make sure that each caregiver takes off PPE properly. (See Box 1 for the latest guidance from the CDC.)

Now

I was going to say that I have faith in our health care system. But actually my faith is in our health care workers...all of those who will risk their lives to provide compassionate care of patients with Ebola. As perianesthesia nurses, we may not be on the frontlines like the nurses, for example, in the Emergency Department (ED) or the Intensive Care isolation wards. But those colleagues are our sisters and brothers, mothers and daughters, and in my case, son (an ED nurse). We must make sure that our facility has protocols and that we not only know what those protocols are, but also how to follow each one perfectly, every time. It is inexcusable for the health care system to simply hand out printouts from the CDC as the education process. What got my attention when Mr. Duncan was admitted was how quickly the blame was put on the nurses about failure to respond to the information that he was from Liberia. We were told the information was not communicated to the physicians. Then we were told that the Electronic Medical Record (EMR) did not communicate that information to physicians—only to find out that the EMR did communicate that information to all health care workers. When the first health care worker, a nurse, contacted Ebola, the first communication from the head of the CDC was that it had to be due to a “breach of protocol”, and it was communicated in such a way that seemed to place blame on the nurse herself. Frieden has apologized for this miscommunication. As I write this, the incident is under investigation as a system failure. These two young nurses and other healthcare workers put their lives on the line to provide care for a deathly ill patient using available resources and knowledge. Now that we know the situation, we need to stand up and have a voice and insist on appropriate PPE and insist on preparedness and education.

The Future

Scientists are currently working on treatments that would help those already infected with the virus

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**Box 1**

On October 21, 2014, the Centers for Disease Control and Prevention (CDC) published new guidelines for healthcare workers caring for Ebola patients.

There are three new recommendations:

1. The health care workers dealing with Ebola patients are “repeatedly trained,” especially when it comes to learning how to don and doff their personal protective equipment.
2. The equipment used should leave no skin exposed.
3. There should be a “trained observer” or site manager, who watches each employee take on and off their personal protective equipment.

and vaccines that would prevent the disease in the first place. Experimental drugs such as ZMapp have been given to some patients already. And the company that produces ZMapp has stepped up production and is working 24/7 to make more of the drug. Other drugs and vaccines are underway and clinical testing has been drastically stepped up from the usual process to move any useful drugs forward. You may wonder why we seem to just now be frantically trying to find a vaccine or drug for treatment of such a dire disease. Dr. Francis Collins, the head of the National Institutes of Health, said that as a result of a decade of stagnant spending “the international community has been left playing catch up on a potentially avoidable humanitarian catastrophe.” The NIH budget has remained stagnant during this time with diminishing buying power. Collins reports that the NIH is trying to do what it can with the money it has, in some cases diverting money from flu research to Ebola. The NIH has a vaccine that is almost ready for human testing and Canada has a vaccine that will also be ready soon—both need clinical testing.

So far, the known deaths from Ebola in West Africa is approximately 4,000 persons. To put it in perspective, flu results in thousands of deaths each year in the U.S.—from a low of 3,000/year to a high of 49,000/year. There are thousands of deaths from auto accidents where the occupants were not wearing seatbelts, thousands of deaths as a result of smoking, thousands of deaths due to gunshots. Panic is not the answer. Clear, honest, transparent discussions on the part of our agencies and support of our health care workers is imperative. A clear protocol and proper equipment is paramount to stopping this virus in its tracks as has been done in past outbreaks in Africa. The reality is that at this time, the infection can only spread through bodily fluids or objects contaminated with the virus. Our job is to make sure that doesn’t happen.

References