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Cardiopulmonary Resuscitation for Ebola patients: Ethical considerations

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Ebola creates a heightened sense of anxiety, worry, and fear both domestically and abroad. Most immediately, one associates the disease with devastating mortality statistics, estimated to be anywhere from 25% to 90% (World Health Organization, 2014). Some of these deaths occur in health care workers on the front lines of care, including nurses. Nonetheless, nurses and other health care providers have willingly cared for ill Ebola patients, and many have volunteered.

All of us who have worked in the nursing and medical professions have been fearful at some point in our careers. Perhaps it was fear of communicating a poor prognosis to a cancer patient, fear of placing an intravenous line in someone with scarred veins, or fear of simply saying the wrong thing to a family in distress. We also at times fear for our own safety such as when a violent patient lashes out or a patient has active tuberculosis or another contagious infectious disease.

Fear of Ebola is now present in our lives. Nurses may be fearful that they could contract Ebola, fearful of retribution if they voice dissent, fearful of not having adequate equipment and training for safety, and fearful for their families and loved ones. Among health care providers, nurses may be more at risk because they spend the most time with their patients in close contact. We know that the viral load of Ebola patients is the highest when they are severely ill, symptomatic, and near death—a critical window for increased risk of transmission and one when intense nursing care is most needed.

Risk is an inherent part of the health care workplace environment. For example, nurses are exposed to blood-borne pathogens, chemicals used for sterilizing instruments, caustic chemotherapeutic agents, residual anesthesia gases, needlestick injuries, and even muscular strains and stressors (United States Department of Labor, 2010). Nonphysical risk also occurs and may include psychological burden and emotional distress. Indeed, health care is s risky business; more than 600,000 injuries and illness cases were reported among health care and social assistant workers in 2010 (United States Department of Labor, 2010). Caring for patients with certain health conditions, such as severe acute respiratory syndrome, multidrug-resistant tuberculosis, other multidrug-resistant organisms, HIV, and now Ebola, has at times raised nurses' concern about balancing possible risk to themselves with their responsibility for taking care of patients. Nurses and other health care providers have a moral and professional obligation to care for patients even in the face of difficult circumstances and some risk to themselves, but this obligation is not absolute. Risk to the nurse can be a justification for not providing particular kinds of care in certain circumstances and can outweigh the nurse's obligations to provide care. In the face of possible serious or life-threatening risks to the nurse, careful analysis of these risks in light of possible benefits to the patient is crucial.

The American Nurses Association (ANA) advises nurses to engage in critical thinking and ethical analysis when resolving questions about risk and responsibility and to examine each situation in light of four fundamental criteria. According to the ANA, a moral obligation to provide care to the patient exists if all four criteria are present: (1) the patient is at significant risk of harm, loss, or damage if the nurse does not assist; (2) the nurse's intervention or care is directly relevant to preventing harm; (3) the nurse's care will probably prevent harm, loss, or damage to the patient; and (4) the benefit the patient will gain outweighs any harm the nurse might incur and does not present more than an acceptable risk to the nurse (ANA, 2006).

How can these criteria help us think through nurses' responsibilities in the current Ebola crisis? Essential

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treatment for Ebola is supportive care, especially the provision of replacement fluids and electrolytes; to date, there are no known effective antiviral agents for Ebola. Clinical reports show that better supportive care improves patients' chances of survival (Briand et al., 2014; Chertow et al., 2014; Fowler et al., 2014). Furthermore, the risk of health care providers acquiring Ebola from patients in their care appears to vary by setting (Belluz, 2014). Sufficient staffing coupled with essential supplies, proper use of personal protective equipment, and adequate training and support make the risk to nurses of acquiring Ebola from patients appear to be low (Boozary, Farmer, & Jha, 2014).

Commentators have raised the thorny question of whether or not aggressive interventions, such as cardiopulmonary resuscitation (CPR), should be routinely offered to patients with Ebola (Fins, 2014). Dr. Fins and others (Altman, 2014) suggest that a unilateral do-not-resuscitate (DNR) order may be acceptable for patients with Ebola because of the questionable benefit of CPR, especially for seriously ill patients, and the possible futility of CPR. The inevitable delay caused by suiting up coupled with the "uncontrolled and chaotic" risk of exposure to blood and secretions from emergent intubation, line placement, chest compressions, and other procedures involved in a code affect both CPR's value and the risks (Fins, 2014).

Whether or not to offer CPR or other aggressive treatments to patients ill with Ebola urges careful assessment of benefits to the patient compared with risk to the nurses and other health care staff in the particular context. These are complicated and ethical decisions and, like many other challenging treatment and care decisions, are part of the daily lives of nurses who care for seriously ill patients and their families. Many factors are considered in decisions about the utility and benefits of CPR in different patient populations with a variety of illnesses and in various settings (Mercurio, Murray, & Gross, 2014). Indeed, conflict can arise when there are divergent preferences and goals or disagreements about the justifications for initiating or withdrawing aggressive care, including intubation, dialysis, and CPR. In many ways, decisions regarding the care of a patient diagnosed with Ebola are no different, but in other ways they may be.

Existing and accumulating evidence and application of the ANA's criteria argue against a categorical decision about CPR in U.S. hospitals and for the assessment of each case on its own merits. In Ebola, important factors to consider include the severity of illness and prognosis of the patient; the likely benefit of CPR for the patient; patient, and family preferences; preparedness of nurses and others on the health care team; and resources available in the setting. The potential for benefit to the patient from CPR can vary. Certain Ebola patients with multiorgan failure, septic shock, and significant hemorrhaging may indeed be unlikely to benefit from CPR, whereas others perhaps experiencing an arrhythmia from severe hypokalemia clearly could benefit from resuscitation and with related intensive and appropriate care have a good chance of achieving a full recovery. The potential risk to health care personnel also can vary. In some settings, such as in a hospital isolation unit, a nurse in full personal protective equipment may already be present with the patient and able to begin resuscitation efforts without delay and without exceptional risk to him- or herself. In other settings, it may indeed be so chaotic or the health care providers insufficiently prepared or lacking the resources to handle it safely that not attempting CPR would be appropriate.

Using lessons learned from accumulating experiences, empirical data from health care clinicians on the front lines of care, and ethical guidance and analysis, it is reasonable for nurses at the national and institutional level to discuss and debate their responsibility to provide care to Ebola patients, the possibilities and magnitude of risk to them, and the methods available to them for mitigating it. Especially important is consideration of the kinds of circumstances under which the risk of offering CPR or other invasive procedures when caring for Ebola patients might be unacceptably high for health care clinicians and how these decisions will be made. Lack of attention to these issues in advance can exacerbate risk, fear, and moral distress.

We need transparency and proactive thinking to address how to make ethically informed decisions about CPR and other invasive procedures on Ebola patients. This will go a long way to protect those in the day-to-day caregiving of the most vulnerable who enter hospitals in this country and outside, minimize professional and public fears, and model the excellent care that nurses have given and continue to give to their patients even when they find themselves in novel and precarious circumstances.

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