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Nurses Leading the Fight Against Ebola Virus Disease

Priscilla L. Sagar, EdD, RN, ACNS-BC, CTN-A[1]

Abstract

The current Ebola crisis has sparked worldwide reaction of panic and disbelief in its wake as it decimated communities in West Africa, particularly in Guinea, Liberia, and Sierra Leone, including its health care workers. This article affirms the crucial role nurses play in maintaining health and preventing diseases, connects the devastating havoc of the Ebola virus disease to another issue of nursing shortage in underdeveloped countries, and asserts the key leadership nurses play in protecting the communities they serve while maintaining their safety and those of other health care workers. Nurses must actively seek a place at the table, as echoed by the American Academy of Nursing and American Nurses Association and the American Nurses Association, when decisions are being made regarding Ebola virus disease: at care settings, in the board room, and at federal, state, and local levels.

Keywords

health disparities, transcultural health, work force diversity, community health

Introduction

The current Ebola virus disease (EVD) crisis has sparked worldwide reaction of panic and disbelief in its wake as it decimated communities in West Africa, including its health care workers (HCWs). Ebola infections among HCWs in West Africa resulted in closing of some health facilities, lack of trust in the health care system, and illness and death in many of the HCWs. All these effects weaken the struggle to control the epidemic (Centers for Disease Control and Prevention [CDC], 2014a, 2014b, 2014c, 2014d). The CDC (2014c) is also concerned that these effects may lead to "a collapse of the basic healthcare infrastructure" (para. 1). The CDC (2014c) is working closely with the World Health Organization (WHO) and the Guinea, Liberia, and Sierra Leone ministries and other international organizations. It is interesting to note that Africa already suffers from severe shortage of HCWs, part of the "brain drain" plaguing underdeveloped countries as its health care professionals—among them nurses in droves—migrate to developed countries in search of better work, living, and educational opportunities (Sagar, 2014).

A severe illness caused by the Ebola filovirus, EVD has a fatality rate of up to 90% (WHO, 2014a, 2014c, 2014d). EVD initially appeared in Africa in 1976, simultaneously occurring in Sudan and in the Democratic Republic of Congo. In the Democratic Republic of Congo, the outbreak arose in a village close to the Ebola River; the disease took its name from this river (WHO, 2014a). Initially reported in March 2014, this is the largest outbreak of EVD and the first of epidemic proportion in West Africa (CDC, 2014c). The death tolls from EVD in July 2014 was 729 out of 1,323 cases (CDC, 2014b). The latest count of human lives lost to EVD is 4,950 out of 13, 241 cases as of November 7, 2014 (CDC, 2014a).

Since the first case of Ebola virus was reported in 2014, the United States began to intensify its effort to protect the public and control the disease at its origin. Concern about the risk of contracting EVD deepened in the United States when the news appeared about the two infected nurses in a Dallas, Texas, hospital in the course of caring for a patient with the disease (American Academy of Nursing [AAN] & American Nurses Association [ANA], 2014). The Obama administration recently issued an emergency $6.18 billion funding request to Congress (The White House, 2014). This comprehensive funding appeal cited speedy and long-term endeavors focused on protecting the American public from Ebola and other infectious diseases and containing the present epidemic in West Africa. Other countries pledging support include China, France, and the United Kingdom, among many others. The CDC (2014b) employs information trainings focusing on the transmission of Ebola, infection prevention and control (IPC), appropriate use of personal protective

[1]Mount Saint Mary College, Newburgh, NY, USA

Corresponding Author:
Priscilla L. Sagar, Professor, School of Nursing, Mount Saint Mary College, 330 Powell Avenue, Newburgh, NY 12550, USA.
Email: priscilla.sagar@msmc.edu

equipment (PPE), safe screening of patients for Ebola, and isolating those suspected of having the virus.

Global Nursing Workforce

In the United States and globally, nurses constitute the largest group of HCWs. In most nations, nurses provide the bulk of health services; nursing services may be as much as 80% of the total health services (International Council of Nurses [ICN], 2007). As such, the global nursing workforce plays a critical role in safeguarding patient safety and in promoting health (Tri-Council for Nursing, 2014).

The number of nurses is critically proportional to effective health promotion, health maintenance, and prevention of diseases. According to the WHO (2014b), the global burden of disease (GBD) refers to the quantification of the burden of disease using the "disability-adjusted-life-year (DALY); this time-based measure combines years of life lost due to premature mortality and years of life lost due to time lived in states of less than full health" (para. 1). The WHO (2014b) has used this measure since 1990 in its effort to continually evaluate the burden of disease across diseases, risk factors, and global regions.

However, there are glaring inequities between the GBD and distribution of HCWs. For example, the United States and Canada, with their 10% GBD, have 52% of the world's financial resources and 37% of HCWs (WHO, 2006). Comparatively, Africa with 24% GBD has only 3% of HCWs (WHO, 2006). For underdeveloped countries, the WHO (2006) recommends 1,000 nurses per 100,000 populations. The United Kingdom and the United States have 847 and 782 nurses for every 100,000 population, respectively. In comparison, the ratio of registered nurses per 100,000 population in Nigeria is 66 (Arends-Kuenning, 2006). In Liberia and Sierra Leone, there are 2.7 and 1.7 nurses and midwives, respectively, for every 10,000 population (Kaiser Family Foundation, 2014); this equates to 17 and 27 nurses for every 100,000 population. The devastation from the Ebola virus is further demolishing the already markedly compromised numbers of HCWs in West Africa.

As a solution to global nursing shortages, developed countries are recruiting foreign-educated nurses (FENs) from underdeveloped nations. The ensuing nurse migration causes severe drain from sending countries; this imperils health care and education of future nurses in underdeveloped nations (Sagar, 2014). There are proposals that would be of mutual benefit for both receiving and sending countries. Some proposals include twinning (Aiken, 2007), circular migration (ICN, 2007), foreign aid investment in the production of nurses (Aiken, 2007; Wong, 2006), train-the-trainer approach, and lobbying for policies in recruitment of FENs (Wong, 2006), to name a few.

There is a huge salary differential between sending and receiving countries. In light of this, Aiken (2007) proposed nonwage strategies such as "twinning" (p. 1316). With support from the U.S. Agency for International development, the Nursing Quality Improvement Program matched U.S. hospitals with Magnet Recognition Program with Russian and Armenian hospitals. According to Aiken (2007), during a 3-year intercountry exchange of nurses and hospital managers, participating Russian and Armenian hospitals achieved the following outcomes: expansion of the professional roles of nurses, improvement in nurses' satisfaction with their jobs, increase in patients' satisfaction with their care, and decrease in adverse patient outcomes.

The ICN (2007) underscored circular migration and calls for programs to support nurses to return to their own countries. In line with the ICN proposal, Sagar (2014) recommends that FENs who had pursued graduate education and gained significant experience in Australia, Canada, the United Kingdom, the United States, and other countries return home for a few months and join forces with and mentor counterparts in nursing education, practice, administration, and research. An example of train-the-trainer approach is the Global Scholarship Alliance partnership with U.S. universities and health care organizations for the improvement of global nursing and a more just distribution of nurses worldwide ("Graduate Education," 2005). Recently, the program funded 28 nurse scholars from the Philippines to pursue an MS degree in nursing at Xavier University in Cincinnati and Long Island University in New York. The scholars are expected to go back to their own countries for a minimum of 2 years to work as leaders in nursing education or administration and develop the next generation of nurses. It is imperative that nurses lobby legislator support for more ethical policies on recruitment and retention. We, indeed, are at the crossroads in history where global strategies, more than ever, are needed for ethical recruitment and retention of FENs.

Meeting Challenges in the Face of Adversity

Nurses not only have the obligation to care without regard to race, color, creed, or the nature of the patient's illness but also have a proven track record of involvement, commitment, and leadership in times of the utmost need and crisis. Florence Nightingale led a group of nurses to make a difference in the mortality of soldiers in the Crimean War. Lillian Wald and Mary Brewster established the Henry Street Settlement in New York City in 1893 when it was teeming with poor immigrants; the settlement later evolved into the Visiting Nurse Services of New York. In 1925, Myra Breckenridge founded the Frontier Nursing Services in rural Kentucky, spearheading health care in difficult to access areas and the mountainous region of Appalachia. Madeleine Leininger—realizing in the 1950s that culturally congruent care was missing in health care—pioneered the field of transcultural nursing and led a movement for six decades that created a huge body of knowledge for culturally congruent care.

The Ebola crisis is new; there are still panic reactions and pervasive misinformation. We need to look back in the early 1980s when the AIDS virus similarly sparked worldwide panic. Presently, we now care for AIDS patients with the latest research and best treatment.

It is vital that nurses collaborate with one another and with the interprofessional team to provide the best possible care using the WHO (2014a, 2014c, 2014d), CDC (2014b, 2014c, 2014d), National Institutes of Health (NIH, 2014), and other similar guidelines. Nurses, the most trusted among health care professionals (Gallup, 2013), are again in the frontlines of caring for suspected and confirmed EVD patients. Nurses spend the most time with patients; hence they are most at risk if infection control procedures are not safely employed (AAN & ANA, 2014).

Nurses Leading in Times of Crisis

Numbering 3,063,163 (U.S. Department of Health & Human Services, Health Resources Services Administration, 2010), nurses not only are the largest number but also have been the most trusted of HCWs in the United States as per the Gallup 2014 survey—not once or twice but for 13 years in a row (ANA, 2014b; Rifkin, 2014). As such, we are very much at a vantage point to lead efforts to educate other HCWs and the public about EVD regarding current safety measures to control the disease and care effectively for the afflicted while ensuring personal safety. Nurses in practice, education, administration, and research have joined forces and voices to call for public and HCW safety as well as immediate and long-term commitments to fight EVD in the United States and globally.

The ANA (2014) has been in the forefront of activism in ensuring that nurses and other HCWs receive guidelines in caring for suspected and confirmed cases of Ebola virus. The ANA president, Dr. Pamela Cipriano, commended the White House for its emergency $6.18 billion funding request to Congress (ANA, 2014).

In a joint statement on October 22, 2014, the AAN and ANA called for immediate and long-term activities as response to the challenges of EVD. Immediate activities called for (a) clear, accurate, consistent, and up-to-date information for HCWs and the public; (b) safe environment for nurses, patients, and other HCWs, including use of PPE and hands-on training; (c) sufficient number of nurses in health care settings to accommodate life-saving requirements for safety protocols; and (d) systems monitoring to identify gaps leading to EVD transmission (AAN & ANA, 2014). The joint statement further called for long-term commitment in protecting the public from EVD and other emerging and recurrent infectious diseases through infrastructure, education, treatment, and vaccines. The AAN and ANA urged nurses' involvement in every level of decision making regarding EVD "from the point of care to the board room and at the federal, state, and local levels" (p. 2).

The Tri-Council for Nursing is an alliance of four independent nursing organizations, namely, the American Association of Colleges of Nursing, ANA, American Organization of Nurse Executives, and National League for Nursing. Representing nurses in practice, administration, education, and research, the alliance is united in common values and meets regularly for dialogues and consensus. In a joint statement, the Tri-Council for Nursing (2014) acknowledged the devastating effects of the Ebola virus in West African communities and its HCWs. Furthermore, the Tri-Council emphasized the demand for an expedient international response in containing this communicable disease. In addition, the Tri-Council points to the intensified concerns in the United States as Ebola infections emerge. Many questions arise: Can the U.S. health care system respond effectively to prevent infection from spreading while maintaining both public safety and caregiver safety?

Caring for Suspected or Confirmed Ebola Patients

It is impressive how the number of references are coming out regarding the Ebola virus, IPC guidance for HCWs, and management of patients. This Ebola crisis needs to be discussed in all settings where nurses provide care for patients. The CDC (2014b, 2014c, 2014d) and NIH (2014) emphasize critical areas such as immediate need to screen patients, meticulous hand hygiene, appropriate use of PPE, proper disposal of sharps, and cleaning and disinfecting of all patient areas. Nurses and other HCWs must be vigilant and receptive to new and up-to-date procedures as information about EVD is evolving (AAN & ANA, 2014).

Patients with EVD typically have sudden fever and malaise, myalgia, headache, vomiting, and diarrhea (CDC, 2014c, 2014d). Severe forms of the disease manifest hemorrhagic symptoms, hepatic failure, and renal failure, leading to shock and death. EVD has an incubation period of 2 to 21 days, usually 8 to 10 days; it is spread to humans after contact with infected bats, rodents, or primates or from contact with body fluids from infected persons (CDC, 2014b, 2014c, 2014d). The NIH (2014) and the WHO (2014c, 2014d) provide specific guidelines in the use of PPE, including donning (putting on) and doffing (removal). No skin should be exposed as HCWs care for suspected and confirmed EVD patients.

Central to every health care setting are patients. Caring holistically for these victims of a devastating disease will pose a challenge to every nurse. How could a nurse effectively impart empathy and caring while ensuring personal safety measures? How can a nurse allay the patient's fears when his or her human fear of contracting the disease is also ever-present? How can nurses support global colleagues in West Africa as the Ebola virus wipes out communities and

reduces the number of HCWs already too few to care for those in dire need? These and many more related questions are difficult to answer. Knowledge and skills are empowering. As more and more updated information and best evidence come to light, many of these questions will be answered. Then and only then, humankind would have triumphed over another epidemic and scourge. Looking back then, the leadership would have been provided by nurses with cohesive, assertive, and united voices.

Conclusion

It is impressive how the number of references are coming out regarding the Ebola virus, IPC guidance for HCWs, and management of patients. With proliferation of information, nurses must work closely within their institutions' policy and procedure guidelines. Staff development specialists must use WHO, CDC, NIH, and the Department of Health resources in every town, city, and county.

As ever, nurses and other members of the interprofessional team must be vigilant in critically appraising the latest knowledge and skills in keeping HCWs safe as well as the communities they serve. Nurse educators, administrators, and researchers must continue to fill leadership roles in order to achieve the purpose of effectively caring for patients suspected or confirmed for Ebola virus while simultaneously protecting nurses and other HCWs with the use of the latest safety measures and guidelines from the WHO, CDC, NIH, the Department of Health, and other agencies. Nurses must actively seek a place at the table, as echoed by the AAN and the ANA (2014), when decisions are being made regarding EVD: at care settings, in the board room, and at federal, state, and local levels.

In summary, this article affirms the crucial role nurses play in maintaining health and preventing diseases, connects the devastating havoc of the Ebola virus to another issue of nursing shortage in underdeveloped countries, and asserts the key leadership nurses play in protecting communities they serve while maintaining their safety and those of other HCWs.

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References

Aiken, L. (2007). U.S. nurse labor market dynamics are key to global nurse sufficiency. *Health Services Research, 42* (3 Pt. 2), 1299-1320. doi:10.1111/j.1475-6773.2007.00714

American Academy of Nursing & American Nurses Association. (2014). *Responding to the challenges of Ebola virus disease.* Retrieved from http://www.aannet.org/index.php?view=article&catid=23%3Anews&id=735%3Aresponding-to-ebola&tmpl=component&print=1&layout=default&page=&option=com_content&Itemid=107

American Nurses Association. (2014). *ANA commends White House for emergency funding request to enhance US response to Ebola.* Retrieved from http://nursingworld.org/FunctionalMenuCategories/MediaResources/PressReleases/2014-PR/ANA-Commends-White-House-for-Emergency-Funding-Request-to-Enhance-US-Response-to-Ebola.html

American Nurses Association (2014b). Public ranks nurses as most honest, ethical profession for 13th straight year. Retrieved from http://www.nursingworld.org/FunctionalMenuCategories/MediaResources/PressReleases/2014-PR/Nurses-Most-Honest-Ethical-Profession-for-13-Years.html

Arends-Kuenning, M. (2006). The balance of care: Trends in the wages and employment of immigrant nurses in the US between 1990-2000. *Globalizations, 3*, 333-348.

Centers for Disease Control and Prevention. (2014a). *2014 Ebola outbreak in West Africa-Case counts*. Retrieved from http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/case-counts.html

Centers for Disease Control and Prevention. (2014b). *Guidelines for evaluation of US patients suspected of having Ebola virus disease*. Retrieved from http://emergency.cdc.gov/han/han00364.asp

Centers for Disease Control and Prevention. (2014c). *Questions and answers: Infection control in general healthcare settings in countries with widespread Ebola transmission (Guinea, Liberia, and Sierra Leone).* Retrieved from http://www.cdc.gov/vhf/ebola/hcp/qa-infection-control-general-healthcare-widespread-ebola-transmission.html

Centers for Disease Control and Prevention. (2014d). *Update: Ebola Virus disease outbreak—West Africa, October 2014.* Retrieved from http://www.cdc.gov/mmwr/pdf/wk/mm63e1028.pdf

Graduate education to ease the global nursing shortage. (2005). *Nursing Education Perspectives*, 26(3), 143.

International Council of Nurses. (2007). *Nurse retention and migration.* Retrieved from http://www.icn.ch/images/stories/documents/publications/position_statements/C06_Nurse_Retention_Migration.pdf

Kaiser Family Foundation. (2014). *Global health facts: Nurses and midwives (per 10,000 Population).* Retrieved from http://kff.org/global-indicator/nurses-and-midwives/

National Institutes of Health. (2014). *Guidance on personal protective equipment to be used by healthcare workers during management of patients with Ebola virus disease in U.S. hospitals, including procedures for putting on (donning) and removing (doffing).* Retrieved from http://www.nih.gov/health/ebola.htm#/121343.

Rifkin, R. (2014). Gallup social issues: Americans rate nurses highest on honesty, ethical standards. Retrieved from http://www.gallup.com/poll/180260/americans-rate-nurses-highest-honesty-ethical-standards.aspx?utm_source=nurses&utm_medium=search&utm_campaign=tiles

Sagar, P. L. (2014). Integrating transcultural concepts in staff development: Recruitment and retention of foreign-educated nurses. In P. L. Sagar (Ed.), *Transcultural nursing education strategies* (pp. 323-340). New York, NY: Springer.

Tri-Council for Nursing. (2014). *Engaging the nursing education community in the local response to the Ebola virus.* Retrieved from http://tricouncilfornursing.org/Home.php

U.S. Department of Health & Human Services, Health Resources Services Administration. (2010). *The registered nurse population: Initial findings from the 2008 national sample Survey of registered nurses.* Retrieved from http://bhpr.hrsa.gov/healthworkforce/rnsurveys/rnsurveyinitial2008.pdf

The White House. (2014). *Fact sheet: Emergency funding request to enhance the U.S. Government's response to Ebola at home and abroad.* Retrieved from http://www.whitehouse.gov/the-press-office/2014/11/05/fact-sheet-emergency-funding-request-enhance-us-government-s-response-eb

Wong, C. S. (2006). Protecting a legacy. *Philippine Nurses Association, 25*(1).

World Health Organization. (2006). *Working together for health: The WHO report 2006.* Geneva, Switzerland: Author. Retrieved from http://www.who.int/whr/2006/whr06_en.pdf

World Health Organization. (2014a). *Ebola virus disease: Fact sheet.* Retrieved from http://www.who.int/mediacentre/factsheets/fs103/en/

World Health Organization. (2014b). *Global burden of disease.* Retrieved from http://www.who.int/topics/global_burden_of_disease/en/

World Health Organization. (2014c). *Infection prevention and control (IPC) guidance summary: Ebola guidance package.* Retrieved from http://apps.who.int/iris/bitstream/10665/131828/1/WHO_EVD_Guidance_IPC_14.1_eng.pdf?ua=1

World Health Organization. (2014d). *Interim infection prevention and control guidance for care of patients with suspected or confirmed filovirus haemorrhagic fever in health-care settings, with focus on Ebola.* Retrieved from http://apps.who.int/iris/bitstream/10665/130596/1/WHO_HIS_SDS_2014.4_eng.pdf?ua=1&ua=1&ua=1