Ebola 101 Module: An Opportunity for Students to Think Globally, Act Locally

Dr. Elizabeth Tinnon, RN, CNE
Assistant Professor
College of Nursing
Objectives

1. The learner will be able to apply the student-created learning module in their own course.
2. The learner will be able to discuss the various components used developing a student-created learning module on Ebola Virus Disease (EVD).
"no longer over there"

The Humanity of Disease
BREAKING NEWS

U.S. EBOLA PATIENT'S CONDITION DOWNGRADED TO CRITICAL

Thomas Duncan is first ebola-diagnosed case in United States
Breach in Protocol Led to New Ebola Diagnosis, Says CDC Director

Oct 12, 2014, 11:48 AM ET

By GEETIKA RUDRA and BEN CANDEA via GOOD MORNING AMERICA

BREAKING NEWS

DALLAS COMMUNITY ON HIGH ALERT

HERO NURSE FIGHTING EBOLA
And so it begins...
Stop Blaming Nurses.
Stop Ebola.
Module Development

• Questions:

  • What did we want the students to learn about Ebola (EVD)?

  • How did we want the students to gain the information?

  • How did we want to evaluate student learning?
Framework

• INQUIRY BASED LEARNING
  • (Levy, Aiyegbayot, & Little 2009)

• Students structured their own learning outcomes

• Students learned by questioning
Group Assignments

• Group 1: What is EVD? Pathophysiology, Epidemiology, Signs & Symptoms

• Group 2: How is EVD transmitted?

• Group 3: What infection control measures are needed to protect health care providers and patients?

• Group 4: How do we treat EVD? Current treatments and vaccines

• Group 5: Tracking EVD: Outbreak map to track EVD from its beginning, discuss how it has "traveled and why"
Group 1: What is EVD? Pathophysiology, Epidemiology, Signs & Symptoms
Group 2: How is EVD transmitted?
STOP THE FLIGHTS!
Formative Evaluation

• We allowed time at the beginning of each class to discuss the current events and the students’ progress

• Students led the dialogue as they discussed the latest news stories and their thoughts on the information

• We discussed source credibility of information

• Students clarified with faculty their plans for the presentation of the data (e.g., some students wanted more guidelines)

• As needed, we discussed group dynamics
Group 3: What infection control measures are needed to protect health care providers and patients?
What infection control measures are needed to protect health care providers and patients?

**Levels of protective gear**

- **Mask or respirator**
- **Goggles, safety glasses or face shield**
- **Hood that covers the neck**
- **A thicker outer glove**
- **Sealed hood**
- **Breathing pack filters air to protect workers from airborne viruses**
- **Seams taped**

**Original C.D.C. Guidelines**
The suit above represents the C.D.C.'s original guidelines for health care workers who would come in contact with Ebola patients but would not be exposed to their blood or bodily fluids.

**North Shore-L.I.J. Level 2 Suit**
The C.D.C. has recommended extra levels of protection, like those above, in cases where workers could come into contact with a patient's bodily fluids. Many hospitals, including the Nebraska center, have required these levels as the minimum. Before this week, this suit was used by North Shore-L.I.J. hospitals for patients who were suspected of having Ebola, but they have since decided to upgrade to the Level 3 Suit instead.

**North Shore-L.I.J. Level 3 Suit**
After the second nurse in Dallas was diagnosed with Ebola, the North Shore system upgraded their Level 3 suit by adding an impermeable gown on top. The suit shown above begins to approach the standard of protection used by health care workers in West Africa. The C.D.C. may soon require full-body suits in the United States.
Group 4: How do we treat EVD? Current treatments and vaccines
THE EBOLA FIGHTERS

Dr. Kent Brantly

The Texas physician, 39, was running an Ebola treatment center in Monrovia when he became the first American to be infected.
Group 5: Tracking EVD: Outbreak map to track EVD from its beginning, discuss how it has "traveled and why"
EBOLA GONE GLOBAL

Current Outbreak: March 2014
- 3/14: Sierra Leone
- 3/15: Costa Rica
- 3/20: Texas (air travel)
- 3/24: Liberia
- 9/11: Nigeria
- 9/28: Dallas, Texas (air travel)
- 10/16: Madrid, Spain (air travel)
- 10/23: New York City, NY (air travel)
- 11/1: Paris, France (air travel)
- 11/1: Nebraska Medical Center

Key:
- [ ] 1976 cases
- [ ] Spread by land
- [ ] Spread by air
- [ ] Cases
- [ ] Deaths

Update Worldwide
- Liberia: 7,156 (c), 3,016 (D)
- Mali: 8 (c), 6 (D)
- Nigeria: 20 (c), 8 (D)
- Sierra Leone: 4,599 (c), 1,398 (D)
- Spain: 1 (c)
- Senegal: 1 (c)
- U.S.: 4 (c), 1 (D)
- Guinea: 2,134 (c), 1,260 (D)
Outcomes

• The student-created learning module was a success for both faculty and students.

• Students utilized the following methods to present
  • Power Point
  • Role Play
  • Hand outs
  • Case Scenarios

• Students structured their own learning

• This learning strategy could be used effectively within any nursing course, and with any content.
What the Faculty Learned

• Take risks
• Seize the opportunity
• There are things you can let go of
• Prepare to be amazed
• Students want to learn
• Be flexible (isn’t that what we tell our students)
• Learning is a journey not a destination
• Reward is important
• Allow ample time for the presentations
What the Students Learned

• Ebola (EVD)
  • Etiology, transmission, prevention, treatment
• More importantly
  • A person not a disease
  • Global things affect me
  • Nurses and the media
  • Importance of infection control
  • Policies matter
• Questions/Reflections Remaining
  • “How would I respond as a nurse?”