Enhancing Community Disaster Resilience Through Collaboration Between the Medical Reserve Corps and Baccalaureate Nursing Curriculum

Pilot Study

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INTRODUCTION

Dr. Ronna Schrum, DNP, RN, CRNP is an Assistant Professor of Nursing at Frostburg State University and serves as the Population-Focused Nursing Care Course Coordinator. Working in the community as a nurse, educator, and preceptor, she is also a Ready Responder in the Maryland Responds Medical Reserve Corps.
PURPOSE

• With the increasing threat of Disasters (natural, environmental, terrorist), it is imperative that nurses are knowledgeable and prepared to offer assistance

• **The purpose of the pilot study:**
  • enhance nurses and nursing students perceptions and understanding of emergency preparedness and disaster awareness;
  • increase the number of competent nurses to actively respond
HISTORY OF THE MEDICAL RESERVE CORPS

• Eleanor Roosevelt

  *Defenseless Under the Night: The Roosevelt Years*
  *and the Origins of Homeland Security*, by Matthew Dallek

• Medical Reserve Corps

• PODS
MARYLAND RESPONDS MEDICAL RESERVE CORPS

- The Medical Reserve Corps (MRC) is a national network of volunteers
- MRC volunteers include medical, such as physicians, nurses, pharmacists, dentist, veterinarians and other public health professionals, and members of the community
- MRC focuses on the health, safety, emergency preparedness and response capabilities of their community

Office of the Assistant Secretary for Preparedness and Response, 2017
MEDICAL RESERVE CORPS (MRC)

- Created in 2002 – response to 9/11 attacks
- Authorized by the Pandemic and All Hazard Preparedness Reauthorization Act of 2013
- Part of the nation’s disaster response and recovery efforts
- Two-thirds of the nation’s 1,000 MRC units are housed in local health departments
- MRC increases local response capability to emergencies, and community health related needs
MRC VOLUNTEERS COME FROM DIFFERENT BACKGROUNDS

- Non-public health/non-medical: 31%
- Registered nurse: 27%
- Other public health/medical: 11%
- Emergency medical technicians: 9%
- Licensed practical or vocational nurses: 5%
- Physicians: 4%
- Mental health/substance abuse professionals: 2%
- Nurse practitioner: 2%
- Pharmacist: 2%
- Veterinarian: 2%
MRC-WHERE DO THEY RESPOND?

- Natural Disasters – hurricanes, floods, earthquakes
  - Superstorm Sandy 2012
- Biologic events – infectious disease outbreaks – flu, Ebola
  - Ebola outbreak 2014
- Man-made disasters – chemicals released, radiological
- Terrorist attacks
  - Boston Marathon 2013
IT’S ALL ABOUT THE COMMUNITY

- MRC assist when local shelters are mobilized
- MRC provides community education
  - Zika
  - Ebola
  - Call centers
- Screening efforts to identify possible infectious disease outbreaks

MRC helps communities build resilience
MRC-PREPARE FOR THE RESPONSE

• Practice drills serve to enhance response capability and build community resilience
• POD exercise – Point of Dispensing
  • - drill to reinforce the teamwork, planning and logistics needed to move many people through a POD as quickly and effectively as possible
• Maryland Responds is the state coordinator of the MRC in Maryland through the Maryland Department of Health
SUPPORTING INCORPORATION OF EMERGENCY PREPAREDNESS INTO CURRICULUM

AACN Essentials of Baccalaureate Nursing

• Essentials V: Healthcare Policy, Finance, and Regulatory Environments
• Essential VI: Interprofessional Communication and Collaboration for Improving Patient Health Outcomes
• Essential VII: Clinical Prevention and Population Health
• Essential VIII: Professionalism and Professional Values
SUPPORTING INCORPORATION OF EMERGENCY PREPAREDNESS INTO CURRICULUM

• Bowker & Tomlinson (2017)
• Department of Homeland Security (2015)
• Jose & Dufrene (2014)
• U.S. Department of Health and Human Services (2017)
• Weiner, Irwin, Trangenstein, & Gordon (November/December 2005)
• World Health Organization (2007)
WHY PILOT AT FROSTBURG STATE UNIVERSITY?

- Online nursing program
- Clinical practicum course supports various community educational opportunities
- Support from Department Chair and Nursing Faculty
- Opportunity to reach several counties in Maryland
INCORPORATING THE OPPORTUNITY INTO THE CURRICULUM

- The Population-Focused Nursing Care course
- Meets course Objectives
- Offers opportunities for:
  - enhanced understanding of emergency preparedness and disasters
  - meeting course learning objectives and outcomes
  - view of nursing outside of the acute care realm
  - creating community resiliency
• Limited emergency preparedness and disaster response training
• Objective for NURS 495 Population-Focused Nursing course
• Current text book includes <10 pages on emergency preparedness & disaster training
• Online offering aligns with online nursing program
IMPROVING STUDENT UNDERSTANDING

• Three levels of prevention
• Community assessment
• Community needs
• Emergency preparedness
• Disaster awareness
• Communication
PROPOSAL

• Presented concept to Department Chair for Nursing

• Supported by Nursing Curriculum committee

• Notified Department of Health and Human Services

• Letter sent to Maryland Responds Medical Reserve Corps Administration
INTEGRATION INTO CURRICULUM

• Students must complete the Ready Responder NIMS ICS:100 and 200 courses
• Courses devised to enhance understanding of the basic emergency preparedness and disaster awareness
• Offers education and insight into incident and command
• Training enhances knowledge and confidence
• FSU RN to BSN students must complete 135 community health nursing practicum hours
• Must write a reflective journal entry on the experience
• 35 hours were credited toward the practicum total for completion of the Maryland Responds Road to Readiness Modules
• Tracking number of participants
• Follow-up feedback (verbal or emails)
PARTICIPATION

• **PILOT FALL 2016**
  - 42% students participated in clinical opportunity
  - 12% participated in MD Responds events after becoming members of the MRC

• **SPRING 2017**
  - 57% students participated in clinical opportunity
  - 20% participated in MD Responds events after becoming members of the MRC
DEFINING RESILIENCE

• The term "resilience" refers to the ability to adapt to changing conditions and withstand and rapidly recover from disruption due to emergencies
• Maryland Responds
• Department of Homeland Security
• The combined efforts of community members responding within current disaster frameworks increase the resiliency of the community

Department of Homeland Security, 2015
CREATING RESILIENCY

- The incorporation of disaster preparedness and response concepts in today's nursing curriculum will serve to support and enhance community resiliency.
- Through the marrying of theory to practice the nurse's role will expand.
- Community resilience will benefit by enabling the objectives of MRC training with curriculum.
CREATING RESILIENCY

• Implementing educational offerings on these topics into nursing curriculum will increase knowledge on the subject and increase the number of competent nurses to assist when an emergency event or disaster occurs
• Opportunity to volunteer and serve communities
• Increased number of resources for communities
• Specific to Maryland: Strengthening communities
STRENGTHENING RESILIENCE

• Since becoming members of the Medical Reserve Corps, approximately 30% have participated in community events
• Education, mock disaster trainings, CPR, Opioid conferences
• 9 counties represented throughout the state
• Support for communities
• Advocating for communities
• Building of competency or resilience may be the most valuable primary preventative strategy
STRENGTHENING RESILIENCY & UNDERSTANDING

• Innovative
• Expanding knowledge (insight): advanced curricular concepts R/T community nursing
• New roles for nurses
• Opportunity to expand and promote the profession of nursing into the community
• Collaboration
• Demonstrating leadership
REFERENCES


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