# INNOVATION IN PUBLIC-HEALTH NURSING EDUCATION: A SURVEY OF STUDENT ACQUISITION OF CORE KNOWLEDGE AND COMPETENCIES

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# Learner Objectives and Disclosure Statements

#### Learning Objectives

- Describe the process of facilitating student acquisition of core knowledge and competencies of public health nursing in a non-traditional clinical placement.
- Discuss the methodology and findings from the survey of students related to their acquisition of the core competencies of public health nursing.

#### Disclosure Statements

- The authors have no conflict of interest.
- The speakers are employed at Marymount University, Arlington, VA.
- There was no sponsorship or commercial support for this research project.

# Background

- Traditionally, baccalaureate nursing programs have partnered with public health departments and community health organizations to engage students in population-based practice
- A paradigm shift in the health care system and nursing education resulted in:
  - Increased competition for clinical sites (Van Doren & Vander Werf, 2011)
  - Decreased funding for health departments (Broussard, 2010)
  - Fewer resources (PHNs) (Keller, et al., 2011)

# Impetus for Change

- External driving forces
  - □ IOM (2011) challenged nursing to create innovative partnerships between practice and academia
  - Affordable Care Act (2010) increased the emphasis on health promotion and disease prevention
- Opportunities for the development of non-traditional community/public health nursing clinical placements
  - Expand the students' view of community-based practice of nursing
  - Increase student engagement with diverse populations in non-traditional settings

# Public Health Nursing Essentials and Competencies

- □ The Essentials of Baccalaureate Nursing Education for Entry-Level Community Health Nursing Practice (ACHNE, 2009)
  - Essential core knowledge for baccalaureate nursing education and entry-level community/public health (C/PHN) nursing practice
  - Seminal framework for planning and implementing C/PHN curricula (Callen et al., 2013)
  - □ The Essentials were based on:
    - A review of key documents informing public health nursing practice:
      - Essentials of Baccalaureate Education for Professional Nursing Practice (AACN, 2008)
      - Public Health Nursing Scope and Standards of Practice (ANA, 2007)
      - Quad Council PHN Competencies (Quad Council, 2004)

# Essentials of Baccalaureate Nursing Education for Entry-Level Community Health Nursing Practice (ACHNE, 2009)

- Health promotion and risk reduction
  - Educate individuals, families, communities/populations about health issues
  - Assess health risks of individuals, families, communities/populations
  - Empower clients to improve health
- Communication
- Epidemiology and biostatistics
- Community/population assessment
- Information and health care technology

- Environmental health
- Illness and disease management
- Human diversity
- Ethics and social justice
- Coordinator and manager
- Community/population planning
- Global health
- Policy development
- Assurance
- Emergency preparedness, response and recovery

# A University and Community Collaboration: Workplace Health Initiative

#### A regional community non-profit business

Provides training and employment for individuals with disabilities or life challenges in the organization's retail and contract settings

#### A national health insurance broker

- Contracted by the non-profit organization to provide guidance on employee health benefit decisions
- Provided needs assessment data
- Facilitated student orientation and engagement

#### ■ Marymount University nursing students (N=52)

- Enrolled in a 15 week (96 hour) C/PHN clinical course
- Partnered with organizations at 13 retail and 2 contract sites
- Utilized the CDC Workplace Model (n.d.) for program development

# Marymount University and Community Workplace Collaboration

#### Major Concerns

- Employees had numerous chronic diseases such as DM, renal disease, CHF
- High costs for health care
- Employees not participating in preventative care services
- Health care for the uninsured

#### Program Objectives

- Assist employees in establishing a medical home
- Assist employees in learning about and locating preventative health services
- Empower employees to navigate the health care system
- Provide quality, evidence-based health education

# Select Student Interventions Informed by the ACHNE Essentials (2009)

Public Health Intervention by Students	ACHNE Essential Core Knowledge Areas
Assessed the health needs of the population	III Community/population assessment X Environmental Health
Assisted employees in accessing and utilizing preventive and therapeutic health care services	VII Illness and Disease Management XIV Coordinator and Manager
Developed, implemented, and evaluated evidence based health education interventions	I Communication  VII Health Promotion/Risk Reduction  XIII Human Diversity
Collaborated with a local non-profit business to support its mission and vision	XII Ethics and Social Justice
Collected and aggregated outcome data	<ul><li>II Epidemiology and Biostatistics</li><li>IX Information and Healthcare Technology</li></ul>

# Purpose of the Research Study

- Explore student perceptions of the acquisition of *Essential* core knowledge competencies gained through this non-traditional clinical learning experience.
- Evaluate student perceptions of the effectiveness of a collaborative partnership among a university, a not-for-profit organization, and an insurance broker on the health of employees.

# **Data Collection**

- Study approved by Marymount University Institutional Review Board
- □ Investigator developed survey based on the *Essential* core competencies (ACHNE, 2009)
- □ Students (N=52) received an email invitation to participate in an electronic survey at the end of the semester
- □ Data collected 2012-2015
- □ n=25 participants (48% response rate)

# Survey Methodology

- 32 item survey based upon 10 of the Essential core knowledge competencies and their associated basic competencies
  - Minor modifications in competency language
  - Students rated how influential this clinical experience was in facilitating knowledge and skill acquisition in select core knowledge areas
    - Likert scale
    - 5 points ranging from "1- not influential" to "5 extremely influential"
  - Two qualitative questions:
    - What is your perception of the impact of the health promotion program on the health of employees of the organization?
    - In what ways do you think this experience will influence your future nursing practice?

# Analysis

- Standard descriptive statistics
  - The grand mean was calculated for each of the 10 the Essential core knowledge areas
    - Ranked the highest and lowest Essential core knowledge areas
  - The means were calculated for the associated basic competencies
    - Ranked the highest and lowest associated competencies
- Qualitative data were examined to identify common themes in two openended questions

# Results:

# Acquisition of the Essential Core Knowledge Competencies

Essential Core Competencies	Percentage of Students reporting the learning environment as "influential" to "very influential"
Human Diversity	96%
Health Promotion/Risk Reduction	91%
Communication	89%
Coordinator and Manager	87%
Epidemiology	83%
Information/Healthcare Technology	80%
Ethics/Social Justice	79%
Community/Population Assessment	79%
Illness/Disease Management	76%
Environmental Health	71%

Results:
Associated Basic Competency Acquisition

15	Highest Means		Lowest Means		
	Demonstrate respect for people with differing values, behaviors, lifestyles	4.38	Foster an environment in which healthy lifestyles can be practiced	3.0	
	Recognize the impact of discrimination on health	4.08	Integrate knowledge of appropriate developmental theories into planning interventions	2.96	
	Educate individuals, families, communities/populations about health issues	4.0	Recognize environmental justice that ensures protection from environmental hazards	2.92	
	Empower clients to improve health	3.84	Use the CDC Workplace Model as a basis of assessment	2.44	
	Communicating with clients of differing health literacy	3.8			
	Assess the health needs and assets of communities/populations	3.72			
	Assess health risks of individuals, families, communities/populations	3.56			
	Use ethical problem solving to address dilemmas of care	3.38			

### **Qualitative Themes**

#### Effectiveness of program

- Client empowerment
- Importance of building supportive work environments

#### Influence on future nursing practice

- Thinking beyond hospital setting
- Thinking holistically and globally
- Awareness of lack of resources for those who are uninsured
- Better understanding of the need for public health services and resources for the underserved

# Discussion of Highest Ranked Competencies

#### 1. Human Diversity (96%)

- Highest means for associated basic competencies:
  - The impact of discrimination on health
  - The opportunity to demonstrate respect for people with differing values, behaviors and lifestyles

#### 2. Health Promotion Risk Reduction (91%)

- Highest means for associated basic competencies:
  - Educate individuals, families, communities/populations about health issues
  - Empowers clients to improve health

### 3. Communication (89%)

- Highest means for associated basic competencies:
  - Communicating with clients of differing health literacy

# Discussion of Lowest Ranked Competencies

- 1. Environmental Health (71%)
  - Recognize environmental justice that ensures protection from environmental hazards
- 2. Illness/Disease Management (76%)
  - Integrate knowledge of appropriate developmental theories into planning interventions
- 3. Community/Population Assessment (79%)
  - Use of CDC Workplace Model (n.d.) as a basis of assessment

# Interpretation of Data

#### □ High Rankings

- The success of the student-driven interventions primarily focused on:
  - Assessment of individual worker health risks
  - Health education activities
  - Employee empowerment
  - Health care navigation

#### Lower rankings

- Student perceptions of their own power limited facilitating environmental/systems changes
- Students may have misinterpreted meaning of the developmental theory competency
- Emphasis on use of CDC model decreased over time due to changes in clinical faculty

## Limitations

- □ Sample size
- Investigator designed survey tool
- Survey focused on 10 of 15 Essential core knowledge competencies and related basic competencies
- □ Timing of the survey
- Change in faculty

## Conclusions

- Findings support the benefits of this non-traditional placement
- Participants perceived the ability to acquire generalist public health nursing competencies
- The Essentials of Baccalaureate Nursing Education for Entry-level Community/Public Health Nursing (ACHNE, 2009) serves as a useful tool for:
  - Student assessment of competency acquisition
  - Guiding the development of innovative partnerships in non-traditional educational settings
  - Evaluating the appropriateness of C/PHN clinical education settings
- Future research
  - Comparison of competency acquisition in traditional and non-traditional clinical education settings

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