

Retooling the Skill Set of Public Health Nurses: An Educational Intervention

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Problem

- Georgia is in the midst of a critical public health nursing (PHN) shortage
- PHNs knowledge of population based health care is lacking

It is essential that Georgia have an adequate supply of well-prepared public health nurses for an effective public health system

Background

- Public Health Nursing issues:
 - Nursing Shortage
 - Budget Cuts
 - Lack of funding
 - Poor recruitment and retention of public health nurses (PHNs)
 - PHN educational requirements
 - Limited population based health care education

Statutory Requirements

Ten Essential Services

Healthy People 2010

- Mobilize community partnerships to identify health problems
- Assure competent public health care workforce
- Evaluate quality of population based health services
- Objective 23: Public Health Infrastructure

Organizational & Individual Nurse Needs Assessment

- State Office of Nursing
 - Needs assessment survey*
 - Focus groups**
- Georgia Department of Public Health
 - 2005 Summit for a Healthy Georgia†

Population Health Competency Development Program Packet, 2004, p 2

**Jakeway, Cantrell, Caon & Talley, 2006, p161

†Brown, S.T., 2005

Needs Assessment Survey

- Statewide needs assessment survey showed 82% of the responding PHNs wanted more population based health care knowledge*
- Focus groups with management and frontline PHNs: nurses unprepared for transition to population based health care**

*Population Health Competency Development Program Packet, 2004, p 2

**Jakeway, Cantrell, Cason & Talley, 2006, p161

Needs Assessment Findings Summit for a Healthy Georgia

1. Improve access to healthcare
2. Promote the community culture and conditions necessary for healthy lifestyles
3. Decrease the number of uninsured and underinsured Georgians
4. Identify and eliminate inequities in health status
5. Address poverty as a root cause of poor health status
- 6. Engage educational partners**
7. Promote safe communities

Brown, S.T. (2005)

Literature Review

Factors Contributing to *Public Health Nursing* Shortage

- Increasing age and retirement and increasing elderly population
- Hospital stays decreasing*
 - More intensive nursing in homes and communities
- Heavier demands on public/community health nurses → **job dissatisfaction**^{††}
- Limited population based health care knowledge → **job dissatisfaction**^{†,**}

*Campbell & Fowles, 2004; ††LaSala, 2000; *Cumbey & Alexander, 1998; †Zahner & Gredig, 2005

**GDHR, DPH, PHN PEW, 2006

Literature Review

Public Health Nursing Shortage

- Percentage of Registered Nurses (RN) in public/community health:
 - 18.3% in 2000 --- 14.9% in 2004
 - FY 2003 – 2006
 - Georgia lost 233 PHNs
 - Lack of funding and budget cuts
 - Federal standard: 1 PHN to every 5000 population
 - In Ga: 1 PHN for every 7,049 population

Losing Public Health Nurses, 2006

Literature Review

- Budget constraints
- Non-competitive salaries
- Retention Aspects:
 - Job features
 - Supportive relationships
 - Organizational factors
 - ✦ Training and development opportunities

Armstrong-Stassen & Cameron, 2005

Campbell, et al, 2004

Jakeway, et al, 2006

Evidence

Continuing Education

- Zahner and Gredig, 2005
 - Cross-sectional written survey, $n=424$
 - Recommendations on PHN undergraduate, graduate and continuing education
 - $n=295$ recommended CE improvements
 - Need for CE targeting population focused PHN roles

Evidence

Continuing Education

- Gebbie & Hwang, 2000
 - Qualitative study using focus groups, $n = 25$
 - PHN community proposed a core CE curriculum
 - Collaboration between PHN practice and education partnerships are essential for PHNs to achieve the required skills to enhance the PH infrastructure

Evidence

Continuing Education

- Jakeway, Cantrell, Cason, & Talley, 2006
 - Retrospective analysis of data from the Population Health online course
 - Decreased enrollment in online 'Introduction to Population Health' course
 - 3-day CE population based health course developed
 - Qualitative data:
 - Greater experience and understanding
 - Total of 350 nurses completed online or CE course

Methodology:

Obtained Public Health Nurse Continuing Education Grant

- Purpose: To provide population based health care continuing education to broaden the foundational skills and competencies of practicing public health nurses.

Targeted Population

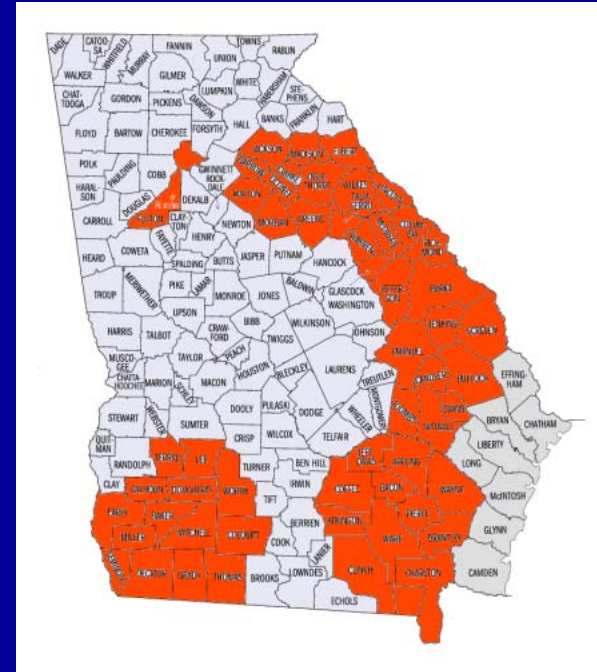
- Georgia's Public Health Nurses
 - County, district, and state PHNs
 - 1579 PHNs, 159 counties, 18 regional health districts
 - Have formal training in public health but need additional population based skills and knowledge
 - Are new to public health and lack formal preparation in population-based health care

Resources

- **\$25,000 HRSA Grant # T10HP07699**
 - Notified of funding September 2006
 - Funding for salary, travel and supplies (computer & camera)
- **MCG Faculty members**
 - Grant + In-kind support
- **Division of Public Health, Office of Nursing**
 - In-kind support
- **Southeast Public Health Training Center (SPHTC)**
 - In-kind support

Grant Advisory Board

- 7 MCG faculty members
- 3 State Office PHNs
- 4 District PH Nursing and Clinical Directors
 - Albany, Waycross,
 - Athens, Augusta
- 1 Assistant District PH Nursing and Clinical Director
 - Athens
- 1 West Georgia University faculty member
- 2 Southeast PH Training Center Representatives



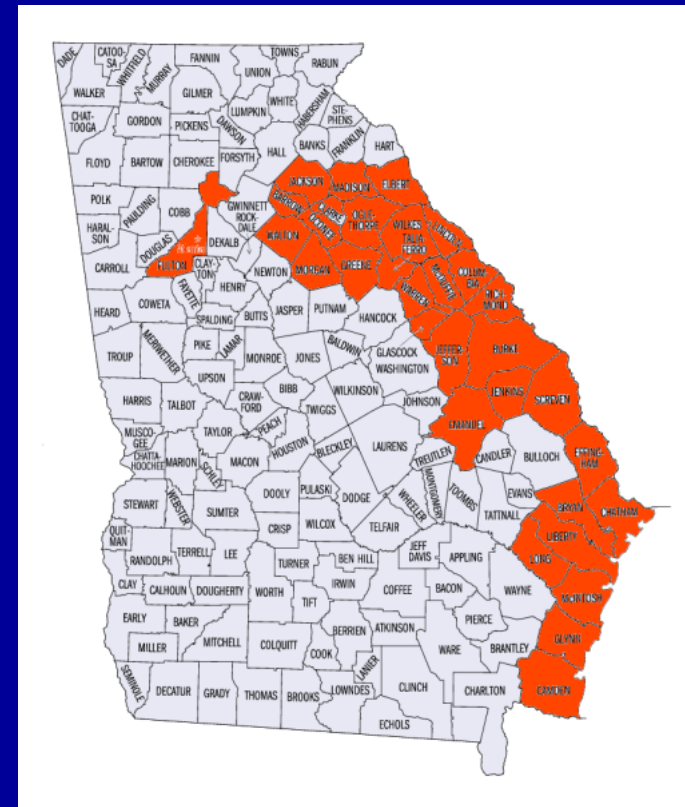
Grant Advisory Board

- With the SPHTC representatives, we were able to collaborate with a much larger area:



Setting

- Statewide availability
 - Face to face: District offices in
 - » Athens
 - » Augusta
 - » Savannah
 - » Atlanta (State Office)
 - Satellite
 - Statewide at District Offices
 - Online courses
 - (later this year)
 - Tegrity Live



Course Content

- *Community Assessment & Grant Writing*
 - *Finance and Policy*
 - *Community Engagement*
 - *Applied Epidemiology*
-
- CE Contact Hours approved for each course

Formative Evaluation

- Importance of returning evaluation forms
- From one District Nursing Director
 - Difficulty reaching rural parts of district- over 2 hour drive to get to district office
 - Attempted use of Tegrity Live

Formative Evaluation

- Communication system was not effective among all partners, which led to challenges in timely dissemination of information to the PHNs

Summative Evaluation: Data Collection

- Quantitative Data
 - Pre-test*
 - Post-test*
 - Content evaluation
 - Presenter evaluation

*Pre and post tests consisted of multiple choice and true/false questions.

Data Collection

- Qualitative data
 - Comment sections of:
 - Course Content evaluations
 - Presenter evaluations
 - Advisory Board outcomes assessment

Data Analysis

Attendance/Form Completion Rate

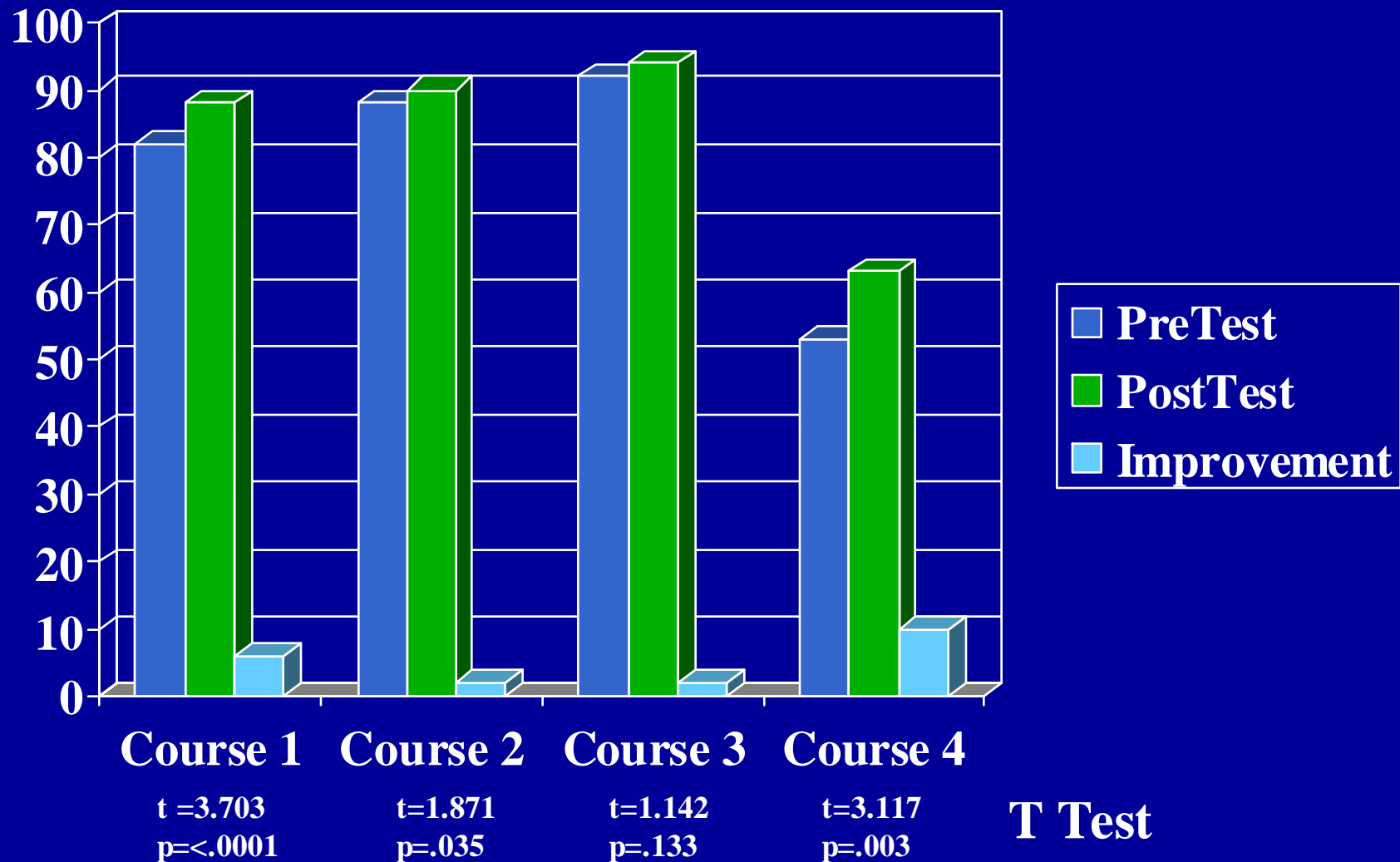
	Signed In	Pre/Post Tests	Content Eval
Course 1	97	59	76
Course 2	39	35	36
Course 3	30	22	22
Course 4	28	17	19
Total (<i>n</i> =)	194*	133	153
% of forms returned		68.6%	78.9%

*Projected 260 participants, Expected 130 participants

PreTest/PostTest Data

	PreTest	PreTest	PostTest	PostTest	
	Correct Range	Avg % Correct	Correct Range	Avg % Correct	% Imp
Course 1	6-11	82%	7-11	88%	6%
Course 2	7-10	88%	7-10	90%	2%
Course 3	7-10	92%	7-10	94%	2%
Course 4	3-9	53%	4-9	63%	10%

Data Collection - Pre & Post tests



T Test

Data Analysis - Course/Content Evaluations

5-point Likert Scale with best possible score = 5

	Content	Instructional Methods	Objectives Met
Course 1	4.34	4.30	4.30
Course 2	4.28	4.25	4.25
Course 3	4.26	4.15	4.60
Course 4	4.32	4.36	4.22
Total Means	4.30	4.27	4.34

Summative Evaluation

- The data show the PHNs knowledge of population based health care increased.
- PHNs were highly satisfied with presenters and content for each course

Qualitative Data Analysis

- Main points
 - “excellent course” comments
 - Dissatisfaction with handouts
 - Timeliness
 - Print too small
 - Dissatisfaction with VICS system
 - Start times delayed due to technical difficulties
 - Organizational structure
 - Notification too late to schedule nurse attendance following first course.

Lessons Learned

- Additional information on sign-in roster would have facilitated analysis
 - Education Level, Race, How long in Public Health
 - Always need demographics!

Next Steps

- Data show the greatest continuing education needs to be in applied epidemiology
- Complete CE contact hour approval process through SPHTC

Advancing Public Health Nursing in Georgia

- Recommendations for Practice Change:
 - Continue partnership between State Office of Nursing and MCG to offer CE's on these topics
 - Continue partnership to reassess continuing education needs annually and offer courses as needed
- Monitor PHN job satisfaction & retention and recruitment
 - Athens
 - Albany

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