

The Future of Nursing Education: Multidisciplinary Community-Engaged Research for Undergraduate Nursing Students

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Background

- Number of nursing faculty anticipated to retire is expected to rapidly increase in the next decade (AACN, 2017)
- Nursing schools need to double the number of doctorally prepared nurses to meet the demand for the anticipated faculty shortage (IOM, 2010)
- Programs aimed at increasing interest, preparation, and experience in nursing research have facilitated increased interest in graduate programs (Burkhart & Hall, 2015)
- Hands-on research experiences can provide nursing students the opportunity to engage in interdisciplinary learning (Slattery et al., 2016)
- Community-engaged research mentoring is a way for students to engage with topics such as cultural-relevance, social justice issues, and community partnerships (Francis-Baldesari & Williamson, 2008)

Mentored Research Experience

Bachelor's in Science of Nursing (BSN) students:

- voluntarily participated in a one year, multidisciplinary, mentored, research experience with two maternal-child health community-engaged projects
- trained in social science research methods including semi-structured interviewing and survey data collection
- introduced to historical research methods
- involved in every stage of research including initiating informed consent with participants, conducting qualitative interviews, collecting survey data, analyzing data, and disseminating results through presentation of research findings in poster format at two conferences
- spent time in the local community and saw firsthand how health inequities are manifested, and social determinants of health at work

Specific Aims

1. Assess BSN student involvement in community-engaged research and the community and its impact on thinking related to individual health and the broader social context
2. Assess how exposure to multidisciplinary, community-engaged research at the bachelor's level may have encouraged plans for graduate study in nursing
3. Explore whether a diversified research experience (community engagement, multidisciplinary mentoring) increases, cultural sensitivity and/or desire to work in underserved communities
4. Explore students' overall experiences with the community-engaged research process

Methods

- Qualitative, exploratory study
- Six third-year, BSN students, interested in involvement in maternal-child health research
- Brief interviewer-administered questionnaire to assess sociodemographic information
- A trained graduate student conducted individual interviews using a semi-structured interview guide to explore student's experiences, attitudes, and future career goals

Data Analysis

- Interviews were analyzed using qualitative content analysis (Elo & Kyngas, 2008)
- Students' participation was categorized into three types of learning activities:
 - direct community engagement and exposure (CE&E), e.g. face-to-face interaction with community members
 - indirect CE&E, e.g. listening to audio-recorded interviews, reading transcribed interviews
 - research activities (RA), e.g. mentored abstract writing session, scientific poster development/presentation, project team leadership role
- Student CE&E was categorized: high levels of face-to-face interaction, low levels of face-to-face interaction, or low levels of overall community-engagement and exposure

Results

Participant Characteristics (N=6)

- 100% female
- 50% self-identified as African American and 50% as White
- Mean age 22.3 years (range 22-23)

Semi-structured Interview Results (N=6)

Themes derived from specific aims	Findings
Aim 1	
Health as part of a broader social context	<u>Summary Description</u> -100% learned about the broader social context affecting secondary students at the school in this community <u>Participation Analyses</u> -Comparing lowest level of CE&E and primarily secondary exposure, highest level of face-to-face participation ----> deeper levels of understanding re. to how social circumstances affected the girls at the secondary school
Aim 2	
Attitudes toward pursuit of graduate level-education OR research	<u>Summary Description</u> -100% are considering graduate study in nursing -67% reported participation in the mentored experience influenced decisions to pursue graduate study in nursing <u>Participation Analyses</u> -Two participants with highest level of indirect CE&E reported the experience: <ul style="list-style-type: none">-had "solidified" plans to earn a clinical master's or DNP-saw nursing as something more than clinical "I got to see nursing as a scholarly role" would not "rule out" a program that included a research requirement -Participant with the lowest level of CE&E and highest degree of participation in RA reported plans to attend graduate school in nursing and remains, undecided about pursuit of a track including research, but is now considering it "because of this experience" -Two participants seriously considering graduate programs in nursing including a research focus were those with the highest level of participation in RA

Semi-structured Interview Results Continued

Themes derived from specific aims	Findings
Aim 3	
Cultural sensitivity OR interest in working in underserved communities	<u>Summary Description</u> -83% gained greater understanding of the role of knowledge re. diversity in nursing practice and/or a new desire to work in underserved communities <u>Participation Analyses</u> -Three participants with highest levels of direct CE&E indicated new interest in "doing something about" and/or general concern regarding issues in this community not directly related to nursing practice
Aim 4	
Unanticipated learning	<u>Summary Description</u> -100% experienced additional benefits and learning beyond the specified aims -Benefitted their traditional BSN coursework: <ul style="list-style-type: none">-felt better prepared for Evidence Based Practice Nursing (required)-involvement in additional activity required them to manage their time carefully and remain "caught up" in their classes <u>Participation Analyses</u> - Students from all levels of CE&E reported community-engagement provided learning experiences not available in the classroom or clinical setting and also validated classroom learning
Growth despite challenges	<u>Summary Description</u> -83% were challenged finding time in their schedules to participate in the many opportunities of the mentoring program <u>Participation Analyses</u> -Students from each lowest level of CE&E and lowest participation in RA struggled with the unpredictable and somewhat unstructured nature of community-engaged research

Conclusions

- We found that exposing BSN students to multidisciplinary community-engaged research positively impacted learning and understanding related to individual health of community members in the broader social context.
- These students have reported increased interest in working with persons in underserved communities related to their experience.
- Student engagement in community-engaged research appears to have increased nursing student interest in pursuing doctoral degrees.
- The students also experienced challenges to include having ample time in their schedules to participate in a mentored research experience.
- This approach may be an important and effective strategy for improved patient care, reduction of health disparities via culturally sensitive care, and increase the number of nursing faculty who can render culturally competent care.