

Family and Community-Based Research: Can It Unify Professional Partnerships?



Background and Significance

- Interprofessional education (IPE) is a critical part of learning about community health. Without a partnership approach, care is fragmented and costly.
- Insufficient evidence exists to assess effectiveness of participation in research as a mechanism for IPE community health education.
- This work was guided by the theory of transformative learning, which supports the premise that students involved in IPE research early in their programs will experience change in their perspective of partnerships in community health.
- The purpose of this study was to explore health profession students' self-perception of learning, with and from each other, in a research-based approach to family and community health.

Specific Aims

- Investigators sought to answer: What is the feasibility and effectiveness of an IPE research-based community health clinical?
- Hypothesis predicts that student scores on the Research Knowledge, Skills, and Attitudes Questionnaire would increase after the IPE experience.
- Specific Aim 1: Assess effectiveness of this research-based activity as an undergraduate educational strategy for health profession students.
- Specific Aim 2: Explore effectiveness of interprofessional education on knowledge, skills, and attitudes about community-based health care teams.

Methods

- Pilot study embedded in IPE community clinical experience
- A convenience sample (n=41) of health profession students from 4 disciplines (nursing, epidemiology, nutrition science, audiology) at a Midwestern University.
- Students participated in ongoing research under faculty guidance: they informed patients about a survey based on Healthy People 2030, reviewed the data, and contributed to a panel discussion about findings.

Table 1

Statistical Analysis of Research Knowledge, Skills, and Attitudes

Survey Item	Participants (n=30) with Positive Difference	Descriptive Statistics Pretest	Descriptive Statistics Posttest	Wilcoxon Signed-Rank Test
I am confident in my ability to engage participants in research studies.	15 (50%)	Mean = 3.6/5 point scale Median = 4.0/5 point scale Std Dev = .72	Mean = 4.1/ 5 point scale Median = 4.0/5 point scale Std Dev = .87	z = 2.845, p = .004
I learned the foundations of evidence-based practice as part of my academic preparation	14 (47%)	Mean = 4.0/ 5 point scale Median = 4.0/5 point scale Std Dev = .77	Mean = 4.5/5 point scale Median = 4.5/5 point scale Std Dev = .57	z = 2.982, p = .003
The recent learning experience in my educational program: improved my <i>knowledge</i> of other health profession roles.	19 (63%)	Mean = 3.6/5 point scale Median = 4.0/5 point scale Std Dev = .98	Mean = 4.5/5 point scale Median = 5.0/5 point scale Std Dev = .63	z = 3.618, p < .001
The recent learning experience in my educational program: improved my <i>attitude</i> about working on a health care team.	13 (43%)	Mean = 3.9/5 point scale Median = 4.0/5 point scale Std Dev = .81	Mean = 4.5/5 point scale Median = 5.0/5 point scale Std Dev = .63	z = 2.862, p = .004
The recent learning experience in my educational program: improved my <i>skills</i> in working with other disciplines that are part of the health care team.	15 (50%)	Mean = 3.9/5 point scale Median = 4.0/5 point scale Std Dev = .85	Mean = 4.5/5 point scale Median = 5.0/5 point scale Std Dev = .57	z = 3.119, p = .002

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Results

- Of the 41 students who participated, 30 nursing students completed a pretest/posttest for the Research Knowledge, Skills, and Attitudes Questionnaire.
- The majority of students were white, non-Hispanic, in their junior year of a baccalaureate accelerated nursing program.
- Wilcoxon signed-rank test, a nonparametric equivalent to paired-samples t-test, determined a median difference between paired observations.
- Scores for five out of ten survey items differed significantly in score improvement. Descriptive statistics and results of the Wilcoxon signed-rank test showed statistical significance (see Table 1).

Discussion

- Findings support the feasibility and effectiveness of an IPE research-based community health clinical.
- Students expressed appreciation for the panel discussion and hearing about research from other disciplines.
- Interdisciplinary engagement failed to achieve the desired level. Students are to be involved in process of planning next steps in effort to increase interdisciplinary effectiveness.

Conclusions

- Preliminary data demonstrate that students have an interest and ability to be engaged in IPE community-based research.
- This suggests potential to strengthen professional partnerships.
- Findings from this novel approach will inform next steps in family and community health education.