

**Nursing Education Research Conference 2020**  
**Investigating the Efficacy of Prelicensure Clinical Interprofessional Education**  
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**Purpose:**

Medical errors are reported as a leading cause of death in the U.S. The Institute of Medicine (IOM) (2000) estimated that 44,000-98,000 deaths annually were attributable to medical error. Additionally, Makary and Daniel (2016) claimed medical error as the third leading cause of death in the U.S. Poor communication among healthcare professionals has been identified as one of the many causes contributing to the staggering numbers of medical errors (IOM, 2011; Nair, Fitzpatrick, McNulty, Click, & Glembocki, 2012). A lack of understanding and respect of other disciplines, as well as the hierarchical nature of relationships all contribute to ineffective communication (Lindeke & Sieckert, 2005; Weinberg, Cooney-Miner, Perloff, Babington, & Avgar, 2011). "Nurses are expected to work collaboratively with other healthcare team members soon after graduation, yet most have not been taught to work in teams" (Wheeler, 2016, p.4). Clinical IPE for nursing students may better prepare nurses to work in healthcare teams upon graduation.

The purpose of this study was to investigate the usefulness of a clinical interprofessional education (IPE) program for undergraduate Bachelor of Science in nursing (BSN) students. It was hypothesized that nursing students who participated in clinical IPE would have better attitudes toward healthcare teams and teamwork than nursing students who did not participate in clinical IPE.

**Methods:**

The research design was a nonequivalent control group, post-test only. Pettigrew's intergroup contact theory provided a framework for this study (Pettigrew, 1998). Nursing students in the experimental group were placed in an interprofessional team of three students. The student teams completed three home visits on an assigned "patient" over one semester. Students in the control group had not participated in IPE (Wheeler, 2016).

The Attitudes Toward Health Care Team Scale (ATHCTS) (Heinemann, Schmitt, Farrell, & Brallier, 1999) was used to measure students' attitudes toward healthcare teams. The ATHCTS yields two subscales: Quality of Care/Process and Physician Centrality. Archived data from nursing students who had participated in IPE was used for this study. An independent *t*-test was used to compare group means (Wheeler, 2016).

**Results:**

Participants in the experimental group had higher scores on the Quality of Care/Process ( $M = 56.20$ ,  $SE = .81$ ) than students in the control group ( $M = 54.18$ ,  $SE = .71$ ), though the difference was not significant,  $t(138) = -1.86$ ,  $p = .06$  (Wheeler, 2016). The Physician Centrality score for the experimental group was significantly lower ( $M = 9.64$ ,  $SE = .60$ ) than the control group ( $M = 13.38$ ,  $SE = .38$ ),  $t(116.28) = 5.24$ ,  $p = .00$  (Wheeler, 2016).

**Conclusion:**

Interprofessional education may be effective in improving nursing students' attitudes toward healthcare teams and teamwork. Students who participated in IPE had more

favorable attitudes toward shared governance in healthcare teams while students in the control group seemed to support physician authority on the team. Students' attitudes toward the quality of care provided by teams were not significantly improved following IPE; however, nursing students in general had positive attitudes toward the quality of care provided by a healthcare team (Wheeler, 2016).

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**Title:**

Investigating the Efficacy of Prelicensure Clinical Interprofessional Education

**Keywords:**

attitudes toward healthcare team, interprofessional education and nursing students

**Abstract Summary:**

Nursing students participated in a pre-licensure interprofessional clinical education (IPE) experience. Attitudes of students toward working in teams, following clinical IPE were compared to students who did not participate in clinical IPE.

**References:**

- Heinemann, G. D., Schmitt, M. H., Farrell, M. P., & Brallier, S. A. (1999). Development of an attitudes toward health care teams scale. *Evaluation & the Health Professions*, 22, 123-142.
- Institute of Medicine. (2000). *To err is human: Building a safer health system*. Washington, DC: National Academies Press.
- Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*. Washington, DC: National Academies Press.
- Lindeke, L., & Sieckert, A. (2005). Nurse-physician workplace collaboration. *Online Journal of Issues in Nursing*, 10(1), 92-102. Retrieved from <http://www.medscape.com/viewarticle/499268>
- Makary, M., & Daniel, M. (2016). Medical error- the third leading cause of death in the US. *British Medical Journal*, 353:i2139. doi:10.1136/bmj.i2139
- Nair, D. M., Fitzpatrick, J. J., McNulty, R., Click, E. R., & Glembocki, M. M. (2012). Frequency of nurse-physician collaborative behaviors in an acute care hospital. *Journal of Interprofessional Care*, 26, 115-120.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65-85.
- Weinberg, D. B., Cooney-Miner, D., Perloff, J. N., Babington, L., & Avgar, A. C. (2011). Building collaborative capacity: Promoting interdisciplinary teamwork in the absence of formal teams. *Medical Care*, 49(8), 716-723.
- Wheeler, B. K. (2016). *Investigating the efficacy of pre-licensure clinical interprofessional education*. (Doctoral dissertation). Nova Southeastern University. Retrieved from NSUWorks, College of Nursing. (35) [https://nsuworks.nova.edu/hpd\\_con\\_stuetd/35](https://nsuworks.nova.edu/hpd_con_stuetd/35).

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**Author Summary:** Dr. Brenda Wheeler is the chair for the department of nursing at Truman State University. Dr. Wheeler has been involved in interprofessional education since 2002 when Truman State partnered with the local osteopathic school to initiate interprofessional education programs. Her interest in interprofessional education continued as she pursued her PhD in nursing education at Nova Southeastern University. In this presentation she will share her findings of her dissertation study.