

PURPOSE

An example of collaborative research between the PhD and DNP faculty in a Family Nurse Practitioner (FNP) program. The purpose of this project included addressing the critical issues and concerns of evaluating FNP student clinical performance considering the differences in clinical sites, patients and preceptors. The study continues across the FNP curriculum to assess evidence-based practice competencies.

- Simulation offers the advantage of predictable environments for FNP students to practice under realistic conditions on standardized case scenarios without the risk of harm to patients or violation of privacy.

- There is minimal research literature on simulation in graduate nursing education.

- Simulation allows for improved opportunity for faculty evaluation of FNP student's clinical skills.

- Simulation engages students in experiential learning that will assist in preparing them to practice as APRNs with expanded technology opportunities.



High-Fidelity Simulation in a Family Nurse Practitioner Program: A Collaborative Project with DNP and PhD Nursing Faculty

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METHODOLOGY

This descriptive, qualitative study utilized a three-stage sampling design over the course of five semesters. Students in two cohorts were evaluated in the **Advanced Physical Assessment, Primary Care I** and **Primary Care II** courses. Students were evaluated on system specific Advanced Physical Assessment skills for management of common health problems using evidence-based practice criteria using high-fidelity simulators.

Simulation scenarios offer the **practical strategy** of a relatively consistent experience in a safe, risk-free environment for the student.

Grading Criteria included:

- Communication
- Subjective Data
- Basic Assessment
- Focused Assessment
- Differential Diagnosis
- Treatment / Plan of Care
- Communication of Findings to Patient
- Proper *Typhon* Documentation



	5 Strongly Agree	4 Agree	3 Neutral	2 Disagree	1 Strongly Disagree
Spring, 2015 (PC 2 n=22) Fall, 2014 (PC 1 n=20) Spring, 2014 (Adv HA n=27) Spring, 2014 (PC 2 n=13) Fall, 2013 (PC 1 n=13) Spring, 2013 (Adv HA n=11) Spring, 2013 (PC 2 n=21) Fall Results 2012 (PC 1 n=21) Spring, 2012 (Adv HA n=19)	N (%)	N (%)	N (%)	N (%)	N (%)
Ability to perform assessment skills.	16 (72.7) 8 (40.0) 12(44.4) 10(76.9) 8 (61.5) 5(45.5) 15(71.4) 10(47.6) 11(7.9)	6(27.3) 11 (55.0) 13(48.1) 3(23.0) 2(15.4) 5(45.5) 5(23.8) 8(38.1) 6(31.6)	0 1 (5.0) 02(7.4) 0 2(15.4) 1(9.1) 1(4.8) 2(9.5) 1(5.3)	0 0 0 0 0 0 0 0 0	0 0 0 0 1(7.7) 0 0 1(4.8) 1(5.3)
Ability to formulate differential diagnoses.	15(68.2) 7(35.0) 10(37.0) 8(66.66) 6(46.2) 6(54.5) 12(57.1) 10 (47.6) 10(52.6)	7(27.3) 13(65.0) 10(37) 5(41.66) 5(38.5) 4(36.4) 8(38.1) 10(47.6)6(3 1.6)	0 0 6(22.2) 0 2(15.4) 1(9.1) 1(4.8) 0 2(10.5)	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 1(4.8) 1 (5.3)
Simulation improves student self-confidence.	15(68.2) 8(40.0) 11(40.7) 8(61.5) 8(61.5) 8(72.7) 10(47.6) 7(33.3) 13(68.4)	4(18.2) 5(25.0) 7(25.9) 2(15.38) 5(38.5) 1(9.1) 5(23.8) 6(28.6) 3(15.8)	2(9.1) 4(20.0) 4(14.8) 3(23.0) 0 1(9.1) 3(14.3) 6(28.6) 2(10.5)	1(4.5) 2(10.0) 5(18.5) 0 0 0 1(4.8) 1(4.8) 0	0 1(5.0) 0 0 0 1(9.1) 2(9.5) 1(4.8) 1 (5.3)

The **Effectiveness Scale** and Pittsburg State University's **Student's Simulation Experience Evaluation Scale** revealed an improved ability to: Perform advanced health assessments, formulate differential diagnoses, plan therapeutic interventions, utilize simulation for evaluation of assessment skills and critical thinking.

Results indicate the project benefitted learning while improving self-confidence. The results also indicated the need for increased use of simulation throughout the graduate nursing program.

Advanced Physical Assessment Scenario: A 35 year old Caucasian female patient with acute lower abdominal pain. Established patient, G3, T2, P 0, A 1, L 2 (ages 5 and 8 years). Pain began 2 days ago, increased intensity & frequency with mild nausea, vomited 2 times, no diarrhea. PMH, Medications, Allergies, Social History, Family History, Vital Signs provided.

Primary Care I Simulation Scenario: A 74 year old female Hispanic with a 5 day history of cough, yellowish phlegm, persistent fever and back pain. Past medical history of DM and HTN.

Primary Care II Simulation Scenario: A 58 Vietnam Veteran who had been episodically and chronically homeless for an unknown period of time. Chief Complaint: Increased left foot pain and fatigue. PMH: Type 2 DM, OA, HTN, dyslipidemia, neuropathy, obesity. Social history: tobaccoism, alcoholism. Needed assistance for community referrals and medications.

