



Developing an Interprofessional Simulation Program for Health Science Professional Students in Physician Assistant and Pharmacy Education



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INTRODUCTION

A 2012 joint statement by the Physician Assistant Education Association (PAEA) and the Society of Teachers of Family Medicine (STFM), called for increased collaboration among health professional education programs to produce innovative interprofessional education (IPE) programs. Accompanying this is an increased emphasis by the accrediting body for pharmacy programs, the American College of Pharmaceutical Education, on interprofessional team dynamics, education, and practice. We developed a series of innovative IPE learning experiences for physician assistant (PA) students and pharmacy (PharmD) students utilizing a state-of-the-art simulation (SIM) center.

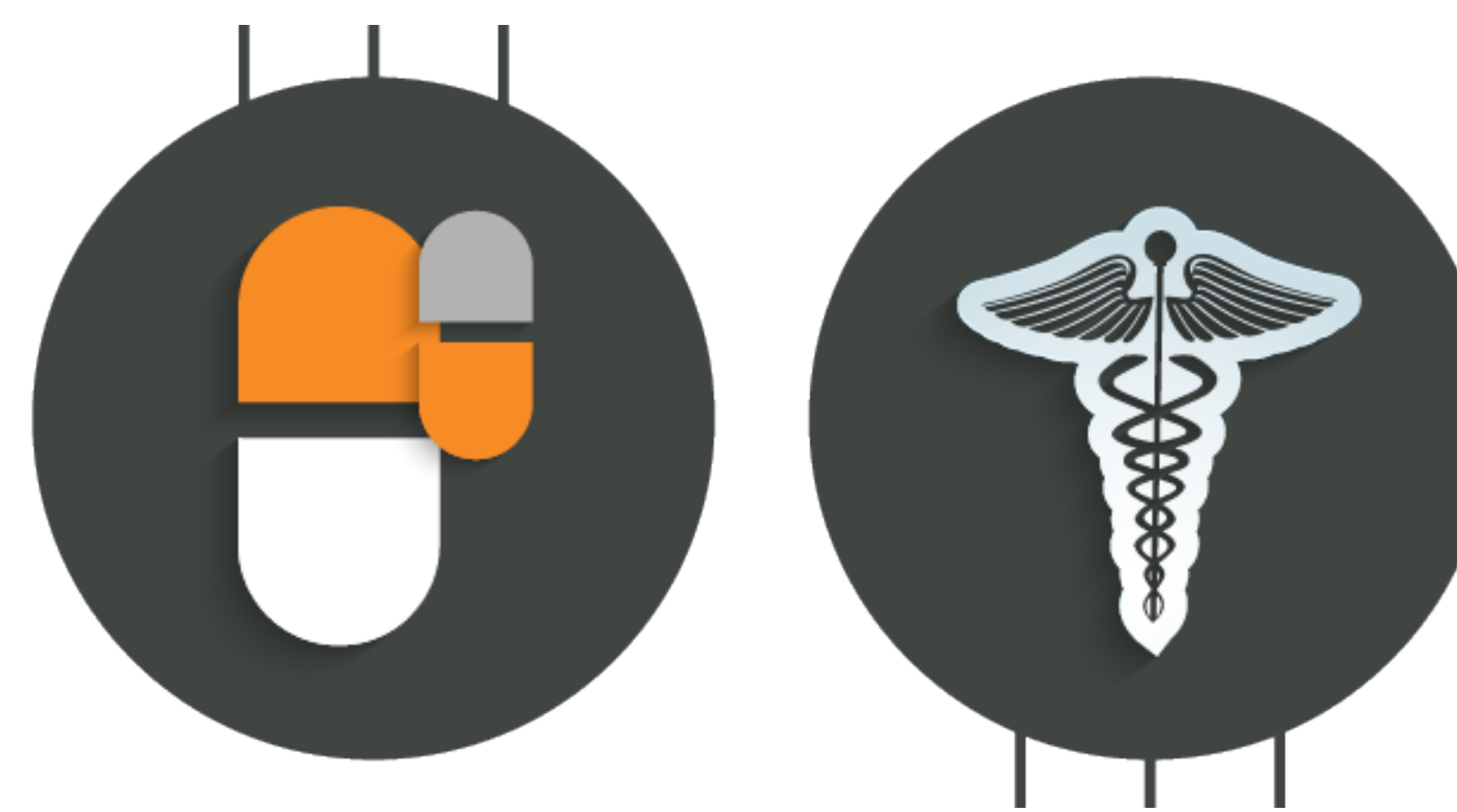
METHODS

Curricular Innovation:

Clinical scenarios were developed requiring students to utilize knowledge and skills appropriate for their unique roles, requiring a team-based approach to the management of the simulated patient. Objectives included learning "about, from and with" each other. SIMs included a debriefing session to review key diagnostic and management strategies.

INTERPROFESSIONAL EDUCATION FEATURES

- Case content created with input from interprofessional team
- Pre-briefing by PA faculty for both groups of students
- Fourth-year student pharmacists present drug information during pre-briefing
- Profession-specific simulation objectives
- Interprofessional debriefing sessions



SURVEY METHODOLOGY

Physician Assistant students were surveyed following completion of simulation events, using an Internet-based survey tool. Responses were scored on a 5-point Likert-like scale where 5 = Strongly Agree and 1 = Strongly Disagree, 3 = Neutral.

Mean scores of student responses from post-simulation surveys						
	Diabetic Ketoacidosis SIM (N=42)	Allergic Reaction SIM (N = 37)	Asthma SIM (N=40)	Labor & Delivery SIM (N=31)	Pediatric Respiratory Illness SIM (N=28)	Seizures SIM (N=31)
The SIM enhanced my understanding - of the disease process, (or) - overall process of evaluation and management	4.56	4.00	NA	NA	NA	NA
The SIM enhanced my ability to evaluate a patient	4.52	4.32	4.15	4.19	4.32	4.35
The SIM enhanced my ability to make a diagnosis	4.41	4.17	4.18	4.00	4.21	4.29
The SIM enhanced my confidence in my ability to treat/manage	4.35	3.97	3.80	3.97	4.3	4.23
The learning objectives for this SIM were clearly stated	4.56	4.06	4.30	4.39	4.37	4.35
The debriefing event enhanced my overall knowledge and skill in evaluation and management	4.38	4.31	3.60	4.1	4.07	4.23
This SIM helped me gain knowledge and confidence in interprofessional roles	4.70	3.73	3.80	3.74	3.82	4.23



Student observations of IPE domains

Roles/Responsibilities	"I thought the case aligned closely with recent therapeutics lectures and helped me apply what we've learned in class. It seemed the other students had related coursework too, which was extremely helpful."
Values/Ethics	"Your participation is important- you need someone to step up to the plate. Don't be afraid to speak up. If no one steps up, nothing will be accomplished."
Interprofessional Communication	"To be a good physician assistant I will need to listen to every part of the healthcare team and make the best decision for the patient regardless of who comes up with the idea."
Teams and Teamwork	"It is good to work with other disciplines because you don't know about every aspect 100%, so with others you were able to understand and come to a complete treatment plan."

DISCUSSION

Participants report enhanced understanding of and confidence in managing disease processes after completion of IPE SIM events. Students also report increased knowledge and confidence regarding interprofessional roles. Students consistently agreed that learning objectives were clearly stated. Based on these preliminary data, planning is underway for increasing the implementation of IPE opportunities within the PA and PharmD curricula as well as with other health sciences students at Campbell University.

MOVING FORWARD

Future Vision

- Expand program to include other disciplines
- Create objectives to evaluate interprofessional core competencies
- Expand the scope of simulation encounters
- Improve data acquisition to include pre- and post- encounter surveys to measure change in ability to apply clinical knowledge and process
- Enhance experiences to include in-situ simulation for students

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