

DIFFERENCE IN THE LEVEL OF CONFIDENCE AMONG PHYSICAL THERAPY AND OCCUPATIONAL THERAPY STUDENTS WHO RECEIVED INTERPROFESSIONAL CRITICAL CARE SIMULATION EXPERIENCES

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Purpose

To determine if there is any difference in the level of confidence among PT/OT students who received interprofessional critical care simulation experiences.



Methods

- One group pre-posttest design
- UT Health San Antonio PT faculty provided 60-minute lecture on ICU lines, tubes and drains
- IPE critical care simulation experience where the objective for the students was to safely conduct a 30-minute initial PT or OT evaluation of a simulated patient (student lab partner) in a simulated ICU environment and complete the evaluation documentation.
- Pre and post survey of 8 items related to confidence level with IPE critical care simulation experience
- Post survey included 5 items related to the IPE critical care simulation experience as a helpful learning activity.

Results

Table 1: Participants Responses on Confidence Level with Interprofessional Critical Care Simulation Experiences (N=80)

This critical care simulation experience allows me to:	Pre-simulation					Post-simulation				
	1 n (%)	2 n (%)	3 n (%)	4 n (%)	5 n (%)	1 n (%)	2 n (%)	3 n (%)	4 n (%)	5 n (%)
1. Verbalize different roles and responsibilities of other healthcare team members in ICU setting	0 (0)	10 (12.5)	38 (47.5)	30 (37.5)	2 (2.5)	0 (0)	1 (1.3)	15 (18.8)	40 (50)	24 (30)
2. Explain the therapeutic service provided by each discipline is complementary and beneficial to the overall patient's recovery	0 (0)	10 (12.5)	26 (32.5)	35 (43.8)	9 (11.3)	0 (0)	1 (1.3)	10 (12.5)	45 (56.3)	24 (30)
3. Perform environment scan and identify safety concerns	0 (0)	10 (12.5)	28 (35)	36 (45)	6 (7.5)	0 (0)	1 (1.3)	8 (10)	46 (57.5)	25 (31.3)
4. Safely mobilize the patient with multiple lines, tubes, drains, and monitoring devices	7 (8.8)	23 (28.7)	40 (50)	8 (10)	2 (2.5)	1 (1.3)	3 (3.8)	16 (20)	49 (61.3)	11 (13.8)
5. Recognize changes in the physiologic parameters and respond accordingly	1 (1.3)	25 (31.3)	33 (41.3)	20 (25)	1 (1.3)	0 (0)	3 (3.8)	19 (23.8)	42 (52.2)	16 (20)
6. Performing evaluation on a patient in the ICU/Acute Care setting	5 (6.3)	27 (33.8)	36 (45)	10 (12.5)	2 (2.5)	1 (1.3)	3 (3.8)	20 (25)	41 (51.2)	15 (18.8)
7. Complete documentation accurately and timely	5 (6.3)	24 (30)	25 (31.3)	23 (28.7)	3 (3.8)	0 (0)	5 (6.3)	22 (27.5)	42 (52.5)	11 (13.8)
8. Complete clinical rotation in acute care setting	3 (3.8)	20 (25)	38 (47.5)	15 (18.8)	4 (5.0)	1 (1.3)	5 (6.3)	15 (18.8)	42 (52.5)	17 (21.3)

Legend: 1= Not confident; 2= Somewhat confidence; 3= Neutral; 4= Confident; 5= Very confident; N= sample size; n=number of responses; %=percentages



Results

- Participants: 41 PT students and 41 OT students
 - 73% Female
 - 45% of participants' age ranged from 20 to 24 years
 - 67% reported not having a healthcare work experience prior to entering the program
- Level of confidence with simulation experiences (Table 1)
 - Overall trend of improvement was seen among participants who reported feeling "confident" and "very confident" (54% and 22% respectively) after the simulation experience.
 - The differences in the level of confidence show non-statistically significant results in all eight categories of the survey. However, there is an overall increased trend in the "high confident" responses in all the categories of the survey when compared the pre-simulation with post-simulation.
- Participant Responses on Interprofessional Critical Care Simulation Experiences as a Helpful Learning Activity
 - Majority of the participants (77% to 89%) reported the critical care simulation experience as being "helpful" to "very helpful,"
 - 10% to 20% of the participants reported the simulation experience as "somewhat helpful."

Conclusion and Relevance

- An overall trend of improvement in the level of confidence was seen with postsimulation.
- One possible reason of an overall high responses of "neutral" and "somewhat confident" at pre-simulation experience was that participants received a robust interprofessional didactic learning activity during their first year due to the requirement of the university.
- Critical care simulation experience may still show some benefits to the level of confidence among students of Physical Therapy and Occupational Therapy.
- It is the authors' belief that the presurvey should be conducted early before the introduction of critical care rehabilitation lecture, to avoid influence of the pre-instruction on the level of confidence, and possibly see more meaningful results.