Summative Evaluation for Simulation Education in a BSN Curriculum

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BACKGROUND
- A desired benchmark for a graduate nurse is their ability to respond appropriately and independently during crisis situations.
- Simulation provides a safe environment to learn critical thinking skills and increase confidence levels for the graduate nurse.

USE OF HUMAN SIMULATION FOR CRISIS SITUATIONS
- Implemented into BSN, Senior level curriculum
- Promotes critical thinking skills
- Increases confidence level
- Summative evaluation of skills validates competency

METHODS
- Quantitative pre/post test
- Qualitative pre/post survey
- Video critique of crisis scenario
- Individual scenario

ON-LINE EXAM
- 30 Questions
- Pre & post course
- Focus on Cardiac Arrhythmias
- Emergency meds
- ACLS Algorithms
- ABGs

SURVEYS
- Completed pre and post course
- Qualitative data collection
- Likert Scale
- Based on skills learned & scenarios
- Personal thoughts and feelings
- Pre – what do you hope to learn?
- Post – how will skills help you as a GN?

VIDEO EXAM
- Record instructors performing a scenario
- Students asked to identify:
  - 5 correct interventions
  - 5 incorrect interventions
  - How to correct them

INDIVIDUAL SCENARIO
- First 3-5 minutes
- Promote Confidence
- 10 criteria met/not met

SAMPLE CRITERIA
Acute MI
- Description of pain
- Place on EKG monitor
- Check vital signs
- Place oxygen
- Call MD – anticipate orders
- Initiate orders
- Communicate with patient
- Reassess vital signs
- Increase oxygen based on decreasing saturation or increasing SOB
- MONA

RESULTS
- On-line pre-test 53.6%
- On-line post-test 77.6%
- Confidence increase of 23.1%
- Video scenario critique mean 97.3%
- Individual scenario mean 95.7%

CONCLUSIONS
- Overall positive experience for students
- Significant improvement of knowledge
- Significant improvement of confidence level during crisis situations
- Utilization of summative evaluation method effective to demonstrate competence in actual performance during crisis situations

CLINICAL IMPLICATIONS
Achievement of improved performance of graduate nurse to respond appropriately and independently in crisis situations.

SIMULATION TO REAL LIFE
Hello Gretchen,
I started my new job in OB. I’ve been there all of three weeks and after my night last night in the nursery, you were on my mind when I went to sleep. So here is my story.

You see, last night we were called to go to the OR for a stat section. The baby was 36 weeks and had a heart rate of 90. We were told to find someone to cover the nursery and that my preceptor and I needed to come back to get the baby. In about 5 minutes we had a baby with no pulse and no respirations. Talk about trial by fire! The pediatrician wasn’t there yet and so it was me and my preceptor and a resident who had no clue what to do. It was at that point that all of the things we had been told and had done in the simulation lab came back to me. Most importantly I stayed calm. I actually kicked the resident out of the way and started bagging cause he didn’t know how to. When respiratory came, I started documenting and yelling at people “what med was that?”, “has anyone gotten a pressure lately?” “what are my temps?” I wrote all over my OR scrubs until someone got me paper.

The moral of this story is that we brought a dead baby back to life and I wouldn’t have had the presence of mind to do anything if it weren’t for the simulation experience. I remembered to take my time when I was running for things so I didn’t spill everything all over the hallway, to stay calm, to keep doing my ABC’s. I really think it may have looked like I knew what I was doing even though I was scared to death!

So, this morning as I sit and think about last evening’s events, I am not sitting here beating myself up because I froze, or didn’t know what to do, and that is largely due to the wonderful preparation that I got at Pitt and it makes me proud to tell people that. ☺

Alison