Use of a Critical Care Simulation as Preparation for Capstone Clinical Experiences

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ANCC

- Continuing Nursing Education

- INACSL is an accredited ANCC provider.
DISCLOSURES

- **Conflict of Interest**
  - Benjamin Smallheer reports no conflict of interest
  - Judson Smith reports no conflict of interest

- **Successful Completion**
  - Attend 90% of session
  - Complete online evaluation
OBJECTIVES

Upon completion of this presentation, participants will be able to:

1. Review expectations of students in a critical care capstone experience
2. Discuss essential knowledge base for successful capstone completion
3. Create critical care simulation design meeting faculty expectations
WE HAVE A PROBLEM!!!!

- Pre-specialty/BSN equivalent cohort
- Final semester
- Prior to capstone experience
- Students admitted to an AG-ACNP
  - 20 students
  - No relevant nursing experience
Faculty Observations

- “Students’ can’t cut it”
- Fear of the critically ill patient
- Intimidated by the equipment
- Lack of familiarity
- Don’t know how to move around the room
Purpose of Simulation

- Enhance student’s familiarity of the critical care environment prior to a critical care capstone rotation
- Improve confidence and preparedness
- Increase knowledge & familiarity with standard critical care experiences
  - Invasive hemodynamic monitoring
  - Mechanical ventilation
  - Vasopressor infusions
  - EKG interpretation of common rhythms seen in an intensive care environment
Background

- Critical care units often utilized as part of a capstone experience
  - Exposes students to a higher acuity patient
  - Greater degree of critical thinking and clinical reasoning
- Varied preparation for these rotations
  - Varied experiences
  - Often inadequate preparation
- Lack of student preparation
  - Fear and anxiety
  - Incapacitating
  - Interfere with learning
Experiential and Deliberate Learning Facilitates a Safe Environment

- **Theories of Experiential Learning (Kolb, 1984)**
  - Understanding of abstract concepts
  - Apply concepts in a flexible range of situations

- **Theory of Deliberate Practice (Ericcson, 2004)**
  - Engagement in highly structured activities
  - Improved performance in a specific domain
  - Require a high level of concentration
  - Not inherently enjoyable
  - Immediate feedback
Methods

- Students arranged in groups of 6-7
- Four hour simulation experience
- Groups rotate through three simulation experiences of varied fidelity
  - A client with variable EKG interpretations affecting their physiologic presentation
  - A patient requiring high oxygen delivery and a chest tube
  - Intubated patient with invasive hemodynamic monitoring
Methods

- Simulations are faculty guided
  - Allow students to openly think, pair, and share
  - Active reflection on the nature of a critically ill patient
  - Faculty able to model the confidence and performance of a critical care nurse
  - Incorporate students into a hands-on simulation
Results: Student Perspective

- Perceptions prior to critical care clinical experience
  - Increased anxiety of hurting the patient
  - Fear of doing something wrong
  - Unsure of how to respond in an emergency situation
  - Uncertainty with ICU technology

- Perceptions at the conclusion of the critical care clinical experience
  - Allowed time and safety to critically think
  - Less intimidated to provide daily care with critically ill patients
  - Rationalize routine interactions with patients requiring invasive monitoring
Results: AG-ACNP Faculty Perspective

- “Better than they have been”
  - Still developing critical thinking skills
  - More familiar with types of equipment and critical care verbiage
- Less fearful of the patient and the technology
  - Ventilators
  - Monitors
  - Various devices
- Not so “deer in the headlights”
- Quicker to acclimate to the environment
Conclusion

- Decreases fear and anxiety prior to entry into a critical care capstone clinical experience
- High-fidelity and low-fidelity simulations help to desensitize the student
- Increased self assurance associated with the day to day responsibilities of a critical care nurse
- Greater attention to be dedicated to critical thinking and clinical reasoning of the critically ill patient
Recommendations for Nursing Education

- Specialty areas carry the potential to intimidate students
  - Psych-mental health
  - Obstetrics
  - Critical care
- Mindfully constructed specialty simulations with clear objectives
- Decreasing fear and anxiety encourages engagement in both experiential and deliberate learning
- More enhanced and meaningful clinical experience
REFERENCES


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