



HALIFAX 2014

The use of simulation in nursing  
education  
Opportunities for Interprofessional  
simulation in health professional  
education.

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# Today

Provide an overview of the use of simulation in nursing education

Provide an overview of the use of interprofessional clinical simulation;

Provide an overview of the analysis used to demonstrate effective aspects of this approach

“have created a need for new methods of instruction, knowledge acquisition and assessment”



# Current state of affairs

- Consider how formal professional education was delivered
- Most healthcare professional education is
  - Didactic
  - Uniprofessional
  - Clinical placement represents 90% of clinical skill training and evaluation
- Simulation is being more widely adopted but have small penetration
- There has not yet been a tipping point

# So what is simulation?

- Case based scenarios in classes - relative to theory content
- Task trainers for skill mastery
- Uniprofessional scenarios
- Interprofessional scenarios
- Role playing
- Anecdotal story telling
- Virtual cases

# So why simulation?

- Using simulation health care professional learners receive:
  - Problem based learning format
  - Case scenario teaching
  - Consistent situations for practice
  - Risk free environments
  - Opportunities for practice and remediation

# Program design and Curriculum goals

- If goal is to teach collaborative practice then content must be on interprofessional knowledge, skills & attitudes.
- Do not confuse teaching content foci with the primary goals of collaborative practice.
- List of essential knowledge, skills and attributes that graduates will possess at the end of the program
- Stated in broad terms and describe graduate requirements



Simulation within a curriculum  
versus  
Simulation beside the curriculum

# Faculty development

- Acknowledge & address professional attitudes & beliefs that may impact trainees
- Start slow - make it easy
- Secure quick wins - health assessment, skills based courses
- Need to “Walk the Talk”
- Need to determine and work collaboratively with faculty to develop expertise

## The challenge...

“The problem of changing the curriculum is analogous to moving a graveyard. It’s not moving the graveyard that’s the problem it’s the friends of the dead.”

(John Gilbert, Principal College of Health Disciplines, UBC 2004)

# Learning

- Time to learn must be separate from assessment and evaluation
- Simulation is an active learning process
- Process includes:
  - Purpose
  - Environment
  - Constructive feedback



# Process to manage the scenarios

- Outline goals and objectives for the simulation
  - Number of participants
  - Environment, including props
- Development of the scenario
- Role assignment - be specific
- Consider staging conflict into scenario

## Debriefing consideration

- value
- 2:1
- Performance driven
- Facilitated learning
- Feed back
- Review forward
- Student involvement
- Ongoing process
- Reflective from prior learning

# Examples

- So how did that session go?
- What were you thinking about then?
- What did you enjoy about this session?
- Would you change anything about the session?
- Things don't seem to be going smoothly at this point - what's happening?



## More questions...

- How did you feel throughout the simulation experience?
- Were you satisfied with your ability to work through the simulation?
- If you were able to do this again, is there anything that you would do differently?
- What did the group do well?
- What did the team feel was the primary nursing diagnosis?
- What were the key assessments and interventions?
- Is there anything else you would like to discuss?
- To Observer: Could the nurses have handled any aspects of the simulation differently?
- Review objectives for simulation.

# Videotaping

- Allows learners to critique own performance - reflective practice
- Allows learners to see consequences of actions/behaviours
- Can review critical incidents repeatedly
- Allows comparison to previous performance
- Captures team interactions - can demonstrate the effect of conflict on the team
- Select use of videotapes
- Consent and signage

# Assessment and evaluation

- There must be a time to learn separate from assessment and evaluation
- Simulation is an active learning process
- The process includes
  - Purpose
  - Learning environment
  - Critical thinking
  - Constructive feedback

# Practice Implications

- To effectively practice remembering, the learner must:
  - Practice retrieving the specific information to be retrieved later
  - Repeatedly practice retrieving the information at longer and longer intervals
  - Practice retrieving at moments when none of the “usual” cues are available

# Incorporation of education theory

1. Meaning to simulation exercise
2. Plan knowledge transfer by situation and context
3. Ensure practice exercises to reinforce remembering -  
timed repeated exercises

# Student evaluations

- “hands on experience was great”
- “Interactive learning was the best”
- “chance to live a real life scenario in a controlled environment was invaluable”
- “wish we had more time in the sim lab”
- “Why can't we do this in earlier”
- “I wish we could learn the complex concepts this way”
- “Can we not bring this into the classroom”

- Realism vs pretending
- Clinical replacement
- Learner readiness
- Faculty readiness
- Co debriefing
- Nursing priorities

## Consider

- Sim team - lone wolf
- Concept map
- Repeating scenarios
- Sim death
- Accreditation stds
- Bigger is not better

# logistics

- Purchasing
- Inventory control
- Right equipment
- Space requirement
- Learners
- Uniform policy
- Scheduling
- Lab kits
- Open access
- Mandatory attendance
- Size of group
  - Labs vs scenarios



# Evaluations in simulation

- Practice struggles
- Clinical skills challenges
- Simulation scenarios

And finally....

- Practice
- Observation
- Learn from others
- Team debrief
- More practice!!!

# Partnerships with clinical

- Orientation - clinical based
- ehr - clinical
- Skills challenged
- Provide a list of all simulations participated in during schooling
- New equipment training

# IPE and Clinical Simulation

- Teams learned to function in an ad hoc manner
- We know little about our team members cultural beliefs, pressures and attitudes
- The trial and error method of team practice isn't working
- Errors occur when teams don't function well

- Clinical simulation should be the golden thread within the curriculum

