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AGENDA

Introduction to Simulation 101, for Teaching and Learning

- Welcome
- Mission and Vision
- Learning Objectives
- What is Simulation?
- Modules Foundational Concepts in Simulation
Introduction to Simulation
Mission and Vision

**Mission** of the Health Care Simulation Center is to provide high quality experiential education through innovative simulation based teaching and inter-professional collaboration to enhance clinical reasoning and safe practices in health care.


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1.1 Learning Objectives

At the end of this training, the learner will be able to...

1. describe what clinical simulation is and why its use is expanding

2. explain advantages of teaching with clinical simulation.

3. describe the steps of planning and teaching with a clinical simulation scenario.
What is Simulation?

https://www.youtube.com/watch?v=1jLpu3qvCgs
1.2 Introduction

Freefall simulates the weightlessness experienced in space.
Why Integrate Simulation?

The true value of simulation lies in its ability to offer experiences throughout the educational process that provide students with opportunities for:

• Repetition

• pattern recognition, and

• faster decision making.

Doyle & Leighton, 2010
1.3 Types of Human Patient Simulators
1.4 Why is Clinical Simulation Needed?

1. Classroom education is not the best approach for a practice-based profession.

THEN

NOW

I hear and I forget

I see and I remember

I do and I understand
1.5 Advantages of Clinical Simulation

1. Provides reproducible scenarios thanks to the CSA templates (California Simulation Alliance)
1.6 Components of Teaching with Simulation

1. Writing Objectives & Scenarios using CSA templates
   Learning Objectives-As with all teaching, clinical simulation must start with clear reasonable learning objectives

2. Preparation of Supplies, Space & Manikin
   The key to simulation is **fidelity**. Fidelity means realism. As much as possible, the sim center should mimic the clinical setting. Set-up should be completed before students arrive to help them achieve the mindset of being in clinical.

3. Student Prep
   Students should arrive to the simulation session prepared. Pre-lab sheets are provided to them via Canvas.
4. Student Orientation
Everything from the Manikin to the Space to the Supplies should be understood and available for the students to inspect, listen to, and touch. This is also a good time to assign roles to the students who may play a primary nurse, secondary nurse, or family member.

5. Running the Scenario
Running a simulation about 20 minutes is sufficient. Simulation that are too long obscure the learning objectives.

6. Debriefing
Debriefing takes place immediately after running the scenario. Ideally, the session is held away from the bedside, often times in another room. A rule of thumb is to spend at lease as much time in debriefing as in the scenario-20:20. Students reflect on their performance, actions, emotions, and beliefs, using TeamSTEPPS.

About TeamSTEPPS. Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) is an evidence-based set of teamwork tools, aimed at optimizing patient outcomes by improving communication and teamwork skills among health care professionals.
1.7 Debriefing

Debriefing (continued)

Debriefing should be a friendly and confidential learning environment. The instructor should set the expectations for the session.

The instructor guides students in discussing...
• What happened?
• What was learned?
• What could be done differently?
In Summary

Summary

• Simulation is a teaching technique, not a technology
• Simulations offer numerous advantages for teaching students in clinical professions.
• The most successful simulations are well-planned and have clear learning objectives.
Module 1 Foundational Concepts in Simulation
Objectives

1. Describe current educational theory supporting simulation as an effective learning strategy for health care teams.

2. Identify the advantages for the use of simulation in healthcare education and training.

3. Discuss types of simulation and select those effective in your practice setting.

4. Describe the components and uses of interprofessional simulation in your practice setting.

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What is simulation and why do we use it in health care?
Key Points

Teaching strategy, methodology

Develop, Refine, Apply KSA’s

Realistic, Participative, Interactive

Gaba (2004)
Durham & Alden (2008)

Marjorie A. Miller, MA, RN, CHSE
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Goal: Support progression from novice to expert

Goal: Promote trust & foster learning

Facilitator creates atmosphere for open sharing of experience

Clinical Simulation in Nursing, INACSL 2011

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Safety Culture

- Team vs. Individual Function
- Emergencies are rehearsed
- Unexpected is practiced
- Communication – high regard

AHRQ

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What is simulation?

Simulation is the imitation or representation of one act or system by another.

4 main purposes in healthcare
- Education
- Assessment
- Research
- Health system integration

To facilitate Patient Safety

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Types of Simulation

- Role Playing
- Standardized Patients
- Task Trainers
  - Partial to complex
- Human Patient Simulators
  - Full Mission

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Interprofessional Simulations

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Why use simulation?

- ↓ human error
- ↑ learner’s decision making skill development
- Practice patient care skills in a controlled environment
- Facilitate on-demand access to patients
- Allow mistakes & facilitate learning from the mistakes
- Support students to analyze own performance to identify performance gaps.
Components of Simulation

Simulation Plan
- Pre scenario learning activities

Pre-briefing
- Expectations, Confidentiality, Debriefing Guidelines, Orientation
- Experience, assigned roles, scripted actors, interprofessional team, case flow

Scenario
- Facilitated reflective thinking session
- Video review, comfortable environment

Debriefing
- 2 pronged – evaluate the simulation itself
- Evaluate/Assess the learning

Evaluation

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