Clinical Judgment and Transfer of Learning from Simulation

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Study Background

• International multi-site mixed methods study conducted at five diverse nursing programs
• N = 275 students
• 3-phase unfolding simulation with perioperative geriatric focus
• Conceptual framework:
  • Bandura – Mastery Modeling
  • Tanner – Clinical Judgment
Study Purpose

• To determine the effect of expert role modeling on nursing students’ clinical judgment in the care of a geriatric surgical patient
Study Background

- Treatment & control groups assigned based on usual clinical group
  - Treatment group exposed to expert nurse role modeling video
  - Control group participated in all other pre-sim activities
- Students randomized to one of three phases
Presentation Purpose

• To report on qualitative findings that expand upon significant between-group findings regarding the effect of an expert role model on students’ clinical judgment
• To explore the question of transfer of learning from simulation to bedside
Qualitative Methods

- Students responded to guided reflection questions at 2 different time points
  - Immediately post-simulation
  - Approximately 4 weeks later after caring for an older adult surgical patient (post-care)
- Questions based on the 11 dimensions of the Lasater Clinical Judgment Rubric (LCJR)
- At post-care, subset (N = 134) reflected on the same questions plus one question addressing transfer of learning
Qualitative Analysis

- Reflection questions served as codes for entering data into NVivo 7.0 program
- Data reviewed using thematic and content analysis
- Consensus reached through group discussion and verified by each researcher
OVERALL FINDINGS
Overall Findings

• All groups able to identify key patient issues
  • Pain
  • Respiratory management
  • Delirium
  • Patient safety

• Not always able to effectively interpret or respond to these issues
Overall Findings

• Developmental stage: Novice
  • Insecurity about skills
  • Difficulty in grasping the situation
    • Students wanted more information about the patient, but did not know what questions to ask.

• Generally unaware of how to evaluate their care
  • Based on “good” feelings or perceptions, not standards of care or knowledge
  • Later reflected on not measuring up to personal standards or expectations
Overall Findings

• **Views of aging**
  - Expected to find patient confused and disoriented before surgery
  - Positive attitude toward aging increases awareness of special needs (Allan & Johnson, 2008)
    - “I was concerned that they wouldn’t deal ... as well as they should mostly because of the patient’s age...As a result of being flat on his back during surgery with no regard to his particular need, the patient woke up in the PACU, in an extreme amount of discomfort...”
Overall Findings

• **Influences on clinical care**
  - Clinical experiences and classroom content, but not reading
    - Students, particularly at less experienced levels, may require more explicit and intentional guidance to connect their learning with their practice or to develop their sense of salience - Benner.
  - Role modeling
    - Unexpected finding: control group referenced role models from clinical situations including staff nurses and clinical instructors
POST-SIMULATION FINDINGS
Post-simulation Findings

- Most dramatic between-group differences
- Expert nurse role model provided exemplar for treatment group
- Themes:
  - **Knowing what to expect**
    - “When I have a baseline of knowledge to draw from and an opportunity to observe a professional nurse’s decision making beforehand, I feel better able to provide quality care than if I hadn’t thought through my priorities…”
Post-simulation Findings

• Themes
  • Increased confidence
    • “felt about 6; this experience was brand new to me, however, having just seen a video of the exact situation, I felt much more confident. ...Without viewing this beforehand, I probably would have been closer to a 1 or 2.”
POST-CARE FINDINGS
Post-care Findings

• Groups more similar at 4 weeks post-simulation

• Themes
  • Increased awareness
  • Increased confidence
  • Positive transfer of learning from simulation to practice
Post-care Findings

• Increased awareness of needs of real-life patients
  • “I felt like I had done it before. Even though I felt disorganized and unprepared for my scenario [phase], I learned from my mistakes and from the discussions held after each scenario. Overall [the sim] experience was helpful, especially... looking back after being in clinical.”

• Confidence
  • “I felt that I was pretty calm and confident in caring for my patient because I knew going in... the possible complications that can occur...“
Post-care Findings

- Transfer of learning to patient care setting
  - Reported research has focused primarily on psychomotor skill transfer
  - Clinical judgment is a complex concept and particular to context of care, patient, and nurse (Tanner)
TRANSFER OF LEARNING
Transfer of Learning

• Focused analysis revealed 3 themes
  • Preparation for real-life patients
  • Recognition of enhanced clinical thinking skills
  • Prioritization
Transfer of Learning

- Preparation for real-life patients
  - Simulation experience facilitated clinical care
  - “Caring for Martha
    - provided a safe way to make decisions and not face real life consequences to the patient.”
    - was an eye opening experience, in that you can’t go in a patient’s room, assuming you know what the situation will be like.”
Transfer of Learning

• Enhanced clinical skills
  • Used clinical simulation to think more deeply about patient care
    • “… made me aware of what to watch for and monitor in an elderly patient who could have a UTI. … I was caring for this (real-life) patient, … first thought of that possibility before beginning my care.”
    • “The simulation emphasized noticing first and modifying your plan according to the circumstances presented. Knowledge of working with other patients and various simulations and lab activities helped me prepare for his needs.”
Transfer of Learning

• **Prioritization**
  • Important focus in clinical reasoning
  • More advanced skill
  • Prioritization of care
    • “During past simulations..., I learned about the importance of turn, cough, and deep breathing, so I determined that this was very important ...to help clear her lungs and help her to breathe better. ..learned that splinting of an incision site will help to reduce the pain... caused by coughing. Pain is also a big factor... I realized that pain management would be a number one priority.”
Transfer of Learning

• Prioritization
  • “...you never know what to expect with your patients. They may be fine one day, but the next day, they may be extremely confused and irritated. It is important to keep a calm head and to prioritize....”
  • “...the priorities of post- op patients. I redirected my focus upon entering the room, based on learning from the simulation.”
Conclusions

• Quantitative and qualitative data support that exposure to expert role model improves aspects of clinical judgment.

• Qualitative data from this study support that students in their prelicensure programs
  • benefit from learning in the safe environment of simulation
  • carry their learning to clinical practice.
Recommendations

• Further study to determine
  • linkages between simulation and clinical practice
  • benefits of simulation on patient outcomes
“Sim showed me you never know what to expect!”
References


