

ASSESSING UNDERGRADUATE NURSING STUDENT SKILLS IN PRIORITIZATION AND DELEGATION DURING SIMULTANEOUS MULTIPLE PATIENT SIMULATION (SMPS).

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DISCLOSURES

Conflict of Interest

- Beth Beadling, MSN, RN (Instructor, Oregon Health & Science University School of Nursing) reports no conflict of interest.
- Julia Greenawalt (INACSL Conference Administrator & Nurse Planner) reports no conflict of interest
- Leann Horsley (INACSL Lead Nurse Planner) reports no conflict of interest

Successful Completion

- Attend 100% of session
- Complete online evaluation

LEARNING OUTCOMES

Upon completion of this educational activity, participants will be able to:

1. Define Simultaneous Multiple Patient Simulation (SMPS).
2. Describe three components of SMPS design.
3. Differentiate skills associated with prioritization and delegation relevant to student performance during undergraduate nursing simultaneous multiple patient simulations.
4. Describe two assessment tools used to measure the growth experienced by undergraduate nursing students during SMPS relevant to the skills of prioritization and delegation.
5. Identify areas for future research pertaining to SMPS for undergraduate nursing students.



PRESENTATION OVERVIEW

This presentation consists of a retrospective review of a simultaneous multi-patient simulation (SMPS) that took place at the undergraduate school of nursing at Oregon Health & Science University, Klamath Falls campus. A design proposal for a future SMPS will also be discussed.

PROJECT PURPOSE

To design and implement a simulation that would require the undergraduate nursing student to manage more than one patient at a time, and exercise skills in prioritization and delegation.

SIMULTANEOUS MULTIPLE PATIENT SIMULATION (SMPS)

Large Scale

Emergency first responders, airports, college drills, poverty SIMS.

Takes place in larger facilities, hospitals, campuses, venues.

Involves many people as victims, patients, or participants.

Small Scale

Nurses, physicians, emergency medical professionals, students.

Takes place in smaller SIM theatres and laboratory settings.

Involves fewer roles/participants, range of 1-4 patients, typically one.

A Proposed Definition for Nursing Education

A simulation requiring the nursing student to attend to and have responsibility for more than one patient throughout the simulation.



SIMULATION AT OHSU/SON/KFO

Traditional 3-year Bachelor of Science in Nursing program.

Klamath Falls campus at Oregon Institute of Technology.

Branch campus in southern OR, main campus in Portland, OR.

Undergraduate cohorts of 24 students each.

Simulation theatre with capacity for one bed and a stretcher.

B-line control room booth with video taping capacity.

Adjacent conference room for de-briefing.

Larger laboratories across hall for other SIMs.

REVIEW OF TWO SMPS'S

Number One – Seniors, 4 patients, SIM conducted in laboratory, Med-Surg setting with four beds, video recording, de-briefing with subject matter expert based on 3D method.

Number two in planning process - Two patients, SIM to be conducted in SIM theatre, ER setting with stretcher and bed, video recording, debriefing with faculty facilitator using 3D method

SIMULATION DESIGN

Collaborative process led by Senior SIM Faculty member.

Consultation with Simulation Technician regarding supplies, programming of manikin, video-taping, and SIM suite B-line technology very early – one month to one year in advance, based in part on previous year's supply list. This proved to be critical. Lead time essential for new SMPS's.

Consult with clinical instructors and subject matter experts, script writing.

Determination of student prep materials to be posted on course website.

Arrangement of volunteer standardized patients.

SIM Number One designed by faculty member – Innovation based on real world Med-Surg experience, and SIM teaching and learning objectives.

SIM Number Two designed by faculty, based on pre-fabricated simulation framework established by Oregon Consortium of Nursing Education.

SIMULATION NUMBER ONE: DESIGN

Followed process previously described.

Took place during winter quarter.

Assigned reading to students prior to SIM:

Guidelines for prioritization, delegation and assignment decisions (Hansten, 2014).

Pre-conference explored SIM objectives, location of supplies, expectations of participants, script review, and Q & A.

Three scenarios, twenty five minutes each, four patients.

SIMULATION NUMBER ONE: OBJECTIVES

Prioritization: the student will notice the most urgent/salient patient situations and addressing those tasks first.

Delegation: the student will determine which tasks can be delegated to others to best manage time and workload.

Communication: the student will utilize therapeutic communication when addressing patient concerns and clearly explain tasks and assignments to those who are delegated to.

Intraprofessional teamwork: the student will collaborate with others to accomplish patient care tasks for a set of four patients to best address urgent situations and provide patient-centered care to patients and families.

SIMULATION NUMBER TWO: DESIGN

Proposed for junior level undergraduate students

Proposed assigned reading to students prior to SIM:

Electrocardiogram (ECG or EKG), 2010, American Heart Association.

Failure to Rescue: The Nurse's Impact (Garvey, 2015)

Guidelines for prioritization, delegation and assignment decisions (Hansten, 2014).

Pre-conference to explore SIM objectives, location of supplies, expectations of participants, script review, and Q & A.

Four scenarios, fifteen minutes each, two patients.

SIMULATION NUMBER TWO: OBJECTIVES

Prioritization: noticing the most urgent/salient patient situations and addressing those tasks first.

Delegation: determining which tasks can be delegated to others to best manage time and workload.

Communication: Utilizing therapeutic communication when addressing patient concerns and clearly explaining tasks and assignments to those who are delegated to.

Intraprofessional teamwork: collaborating with others to accomplish patient care tasks for a set of two patients to best address urgent situations and provide patient-centered care to patients and families.

PRIORITIZATION

SIM number one : student in role of nurse receiving morning report regarding four patients on Med-Surg unit.

Patient number one: (SP) 62 year diabetic old male admitted to ER for abdominal pain a nausea, scheduled for cholecystectomy later this morning, anxious at family member at bedside.

Patient number two – (SP) 85 year old female diagnosed with community acquired pneumonia, on MRSA precautions. Restless, needs stand-by assist to toilet.

Patient number three – (Manikin) 58 year old male admitted through ED with shortness of breath related to exacerbation of congestive hear failure. To be discharged later this morning.

Patient number four – (SP) 34 year old dialysis patient admitted for fever last night. Patient develops adverse reaction to antibiotic administered early this morning.

PRIORITIZATION

SIM number two: student in role of nurse in Emergency Department, receives two patients admitted around the same time for chest pain.

Patient number one – (Manikin) 60 year old male admitted for persistent chest pain that developed two hours ago

Patient number two - (SP) 64 year old female admitted for chest pain that has been intermittent for the last two weeks.

Student to assess patients, evaluate diagnostic information and collaborate with other members of the healthcare team while providing patient centered care.

DELEGATION

SMPS number one: Student in role of nurse has option to delegate tasks to certified nursing assistant, coordinate care with charge nurse, and interface with hospital staff from lab (phlebotomist) and patient transport departments.

SMPS number two: Student in role of nurse has option to delegate care to Emergency Department Technician and coordinate care with charge nurse.

PHOTOS OF SMPS NUMBER ONE























































DE-BRIEFING WITH FACILITATOR

Debriefing:

A reflective process immediately following the simulation based experience that is led by a trained facilitator using as evidence-based debriefing model. Participant reflective thinking is encouraged, and feedback is provided regarding the participants' performance while various aspects of the completed simulation are discussed. Participants are encouraged to explore emotions and questions, reflect and provide feedback to one another. The purpose of debriefing is to move toward assimilation and accommodation to transfer learning to future simulations.

(INACSL Standards of Best Practice: Simulation, Simulation Glossary, retrieved April 2017.)

SMPS ASSESSMENT: THE 3D METHOD OF DEBRIEFING

SMPS Debrief Design - We use the 3D Debriefing Method

- Defuse
- Discuss emotions
- Recap Events
- Needs Assessment

Discover

- Mental models
- Reasoning

Deepen

- Apply new information to practice

WHY WE USE THE 3D METHOD OF DEBRIEFING

Relationship to Kolb's experiential learning cycle.

Concrete experience: creating a safe environment, ground rules, defined objectives, confidentiality.

Reflective observation: defusing, re-capping, conducting a needs assessment, video review.

Abstract conceptualization: discovering mental models guiding behavior.

Active Experimentation: Prompting student to apply new information to practice, re-stating learning objectives and lessons learned through discussion.

WHY WE USE THE 3D METHOD OF DEBRIEFING (CONT.)

Effective Practice Based Learning

The Individual – Feels safe, knows what to expect, given preparation ahead of Key Experiences – Challenging, emotionally charged, mistakes or errors.

Learning Environment – Additional information, skilled mentors.

The 3D model was used with more fidelity during SMPS number two as compared with SMPS number one

Zigmont, J.J., Kappus, L.J., Sudikoff, S.N. (2011). The 3D Model of Debriefing: Defusing, Discovering, Deepening. Seminars in perinatology. Doi:10.1053/j.semperi.2011.01.003.

DE-BRIEFING WITH NURSE SUBJECT MATTER EXPERT

Based on 3-D Method

Nurse subject matter expert partnered with us to de-brief simulation experience number one.

Shared her experience as hospital supervisor and clinical instructor during Med-Surg clinical rotations.

Contributed to creation of safe open environment in which to discuss SMPS experience.

The plan for simulation number two is to follow this model and bring in nurse subject matter expert from the emergency department to assist with de-briefing.

FORMATIVE ASSESSMENT

“Any instructional activity that allows teachers to uncover the way students think about what is being taught and can be used to promote improvements in students’ learning can serve a formative purpose”

(Trumbill & Lash, 2015)

ASSESSMENT OF STUDENT PERFORMANCE DURING SMPS

Based on self assessment, peer assessment, assessment by clinical faculty and assessment by SIM Facilitator.

No grading scale, completion of activity based on participation in simulation.

Occur formally during de-briefing and informally amongst students on their own time.

Special Ops person – Observes simulation

ASSESSMENT VS EVALUATION

Assessment refers to processes that provide information about or feedback about individual participants, groups, or programs. Specifically, assessment refers to observations of progress related to knowledge, skills and attitudes (KSA). Findings of assessment are used to improve future outcomes.

Evaluation is a broad term for appraising data or placing a value on data gathered through one or more measurements. It involves rendering a judgment including strengths and weaknesses. Evaluation may be formative, summative, high stakes, or related to the simulation program or process.

(INACSL Standards of Best Practice: Simulation, Simulation Glossary, retrieved April 2017.)

WRITTEN REFLECTION : "TAKE-AWAYS"

[C:\Users\beth.beadling\Desktop\SIMREFLTOOL.pdf](#)

EVALUATION OF SMPS AS LEARNING ACTIVITY AT OUR CAMPUS

SMPS Number One - a brief email questionnaire was sent to each participant. The return rate was low.

SMPS Number Two - a standardized take-away form was used to gather participant evaluation data

Student feedback has been mostly positive.

The 3D Model for debriefing contributes to a comfortable and productive learning environment.

Within the undergraduate nursing program, SMPS appears to be most appropriate for junior and senior level students.

The SMPS experience should be seen as an innovative learning and teaching opportunity, sought after by nursing students, and supported by nursing faculty.

SUMMARY/CONCLUSION

SMPS is a complex, time and resource intensive activity that can be designed and customized to support specific learning objectives.

SMPS at our campus was, on the whole, a positive experience for students and faculty, that benefitted the nursing students learning experience.

SMPS design and implementation should be considered innovative and a high priority in undergraduate nursing education.

More research should be undertaken to examine the advantages and disadvantages of including SMPS based learning activities in the nursing curriculum.

REFERENCES AND ACKNOWLEDGEMENTS

Bensfield, L.A., Olech, M.J., & Horsley, T.L. (2012). Simulation for high stakes evaluation in nursing. *Nurse Educator*, 37(2), 71-74.

Blodgett, T.J., Blodgett, N.P., & Bleza, S. (2016). Simultaneous multiple patient simulation in undergraduate nursing education; A focused literature review. *Clinical Simulation in Nursing*, 12(8), 346-355.

Fisher, D., & King, L. (2013). An integrative literature review on preparing nursing students through simulation to recognize and respond to the deteriorating patient. *Journal of Advanced Nursing*, 69(11), 2375-2388.

Hayden, J., Smiley, R.A., Alexander, M., Kardong-Edgren, S., & Jeffries, P.R. (2014). The NCSBN National Simulation Study: A longitudinal, randomized, controlled study replacing clinical hours with simulation in prelicensure nursing education. *Journal of Nursing Regulation*, 5(2), S4-S64.

Horsley, T.L., Bensfield, L.A., Sojka, S., & Schmitt, A. (2014). Multiple patient simulations. *Nurse Educator*, 39(6), 311-315.

Ironside, P.M., Jeffries, P.R., & Martin, A. (2009). Fostering patient safety competencies using multiple patient simulation experiences. *Nursing Outlook*, 57(6), 332-337.

INACSL Standards Committee (2016, December). INACSL standards of best practice: Simulation, *Simulation Glossary: Clinical Simulation in Nursing*, 12(s), S39-S47.
<http://dx.doi.org/10.1016/j.ecns.2016.09.012>.

Jeffries, P.R. (2005). A framework for designing, implementing, and evaluating simulations used as teaching strategies in nursing. *Nursing Education*

REFERENCES AND ACKNOWLEDGEMENTS_(CONT.)

Kardong-Edgren, S., Willhaus, J., Bennett, D., & Hayden, J. (2012). Results of the National Council of State Boards of Nursing National Simulation Survey: Part II. *Clinical Simulation in Nursing*, 8(4), e117-e123.

Lee, J., & Oh, P.-J. (2015). Effects of the use of high-fidelity human simulation in nursing education: A meta-analysis. *The Journal of Nursing Education*, 54(9), 501-507.

Lioce, L., Meakim, C.H., Fey, M.K., Chmil, J.V., Mariani, B., & Alinier, G. (2015). Standards of best practice: Simulation standard IX: Simulation design. *Clinical Simulation in Nursing*, 11(6), 309-315.

Oh, P.-J., Jeon, K.D., & Koh, M.S. (2015). The effects of simulation-based learning using standardized patients in nursing students: A meta-analysis. *Nurse Education Today*. 35(5), e6-e15.

Rudolph, J.W., Simon, R., Rivard, P. et al (2007). Debriefing with good judgment: Combining rigorous feedback with genuine inquiry. *Anesthesiology Clinician* 25:361-376

Rudolph, J.W., Simon, R., Dufresne, R., & Raemer, D.B. (2006). There's no such thing as "nonjudgmental" debriefing: A theory and method for debriefing with good judgment. *Simulation in Healthcare*, 1(1).

Trumbul, E., & Lash, A. (2013). Understanding formative assessment: Insights from learning theory and measurement theory: San Francisco: WestEd

Zigmont, J.J., Kappus, L.J., Sudikoff, S.N. (2011). The 3D Model of Debriefing: Defusing, Discovering, Deepening. Seminars in perinatology. Doi:10.1053/j.semperi.2011.01.003.



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