

Operating Room (OR) Orientation:

Bridging the Gap from Classroom to OR with Simulation

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Clinical Issue / Identified Gaps

An academic medical center, which includes seven hospitals, had an established surgical services orientation class. The third day of this class included both lecture in a classroom and hands on skills and simulations for nurses, surgical technologists, and other intraoperative staff. Previous class participants provided feedback that more hands on time would increase staff knowledge, skills, and confidence when entering a real operating room (OR). Therefore, the surgical services nurse educator requested simulation scenario development.

Description of Team

The team included a simulation lab education facilitator and the nurse educator for surgical services.

Preparation & Planning

The third day of the surgical services orientation class was already taking place at the center for simulation, but scenarios were not part of the curriculum. The team revised the class to include both skills and simulation scenarios. New and specific learning objectives were established early in the planning process. After that, the facilitator and the educator developed, edited, and tested the simulation scenarios. A practice run of the scenarios took place before implementation.



Supplies & Equipment

Simulation should take place in an actual Operating Room or a simulated OR. Supplies that will be needed for a realistic laparoscopic scenario may include:

- Manikin with wig, hair cover, and patient armband
- Gowns, gloves, masks, goggles, hair covers, & shoe covers
- Laparoscopic equipment, instruments, and trocars
- Skin antiseptic / Prepping agent
- General instrument tray
- Patient armband
- Laparoscopic surgery pack
- Preference Card
- Simulated local anesthetic
- Surgical consent form
- Various countable items
- Anesthesia consent form

Simulation Case Description

The facilitator should set the stage for the learners so they know what to expect. Example: "Patient is a 41 year old female with a history of nausea, vomiting, and right upper quadrant pain. The patient is allergic to penicillin, reporting hives and itching. The patient has been scheduled for a laparoscopic cholecystectomy."

Scenario Progression & Cues

The simulation scenario progresses based on actions that are performed by the learners and cues from the nurse educator and the facilitator.¹ Questions are answered as they arise throughout the day, during both the skills lab portion and the actual scenario portion. Examples include:

Learner does not question the patient regarding their NPO status

↓
Patient (manikin) asks for a drink before they go back to the OR

↓
Learner explains why the patient cannot have anything by mouth at this time

Moulage is used to create a bruise on the patient's thigh

↓
Electrocautery pad should not be placed over a bruise

↓
Discussion occurs regarding proper pad placement

Implementation

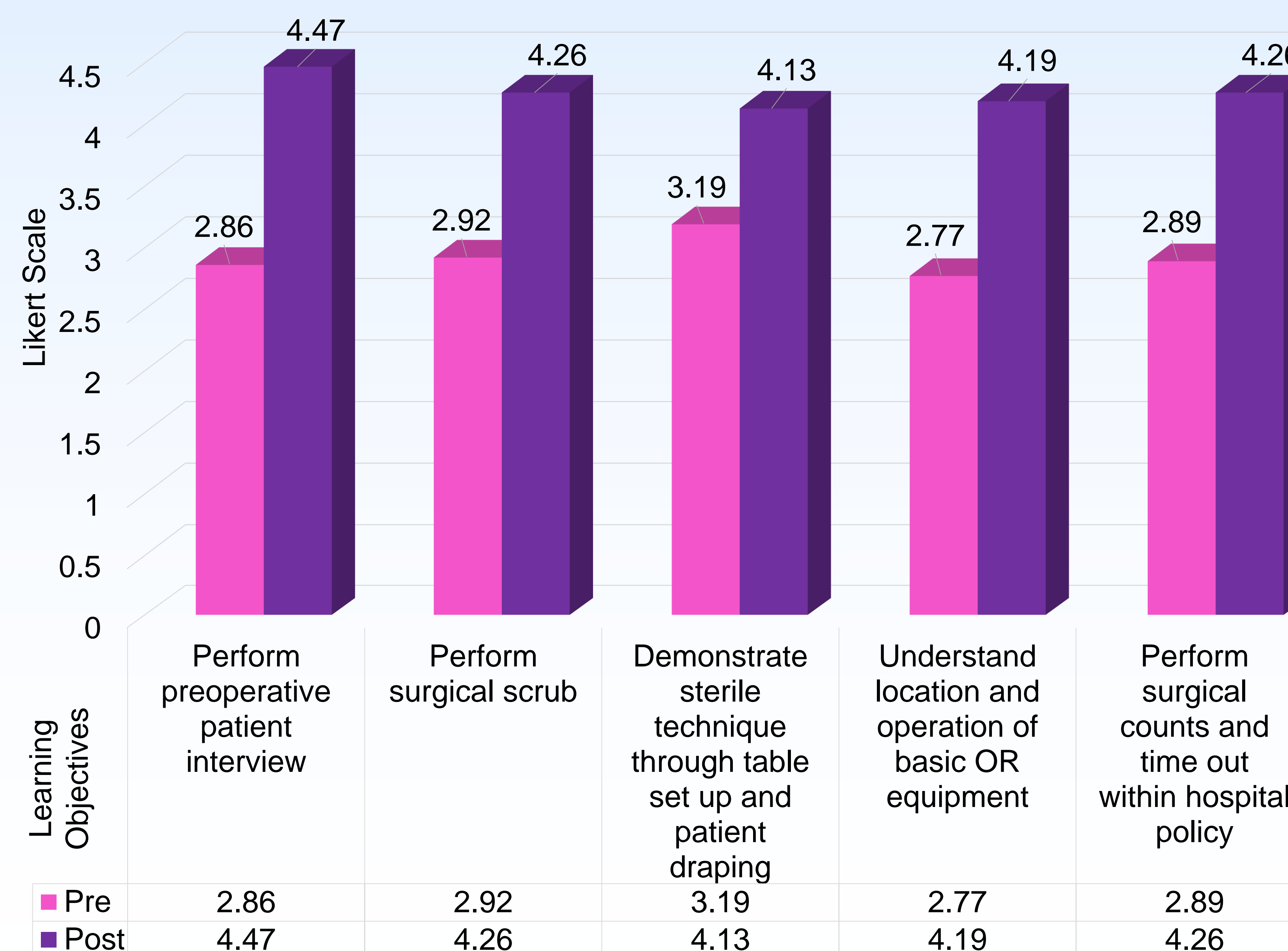
The first few hours of class consists of practicing skills such as preoperative patient interview, scrubbing, gowning, gloving, sterile table set up, instrument identification, and counting. In the afternoon, learners participate in two laparoscopic scenarios. The scenario begins with setting up the OR and ends with Time Out #2. Over the course of one year, 74 learners have participated in the orientation simulations.

Assessment

A pre and post evaluation was used as an assessment tool. The learners were asked to assess the change in their knowledge and skill level. The learners rated their level of confidence for each learning objective using a 5-point Likert scale, ranging from "Very Low" (score of 1) to "Very High" (score of 5).²

Outcome

Data analysis was performed on the self-evaluations using a paired sample t-test. All evaluation scores were statistically significant with a p-value less than 0.001.



Feedback

Written feedback from the learners included the following comments:

- I found the simulation experience very helpful and I wish I had one as a new grad. I believe it is a great way to bridge from classroom to real OR. It allowed us to ask questions and fully understand concepts.
- I loved the hands-on experience. I feel more prepared to start working. The staff was great and exceeded expectations.
- I think it's very comprehensive and relevant to our scope of practice.
- I'm so impressed with the orientation provided. Excellent instructors! Very comfortable atmosphere providing great learning environment
- It is important to have a first hands-on experience in a more relaxed environment when there is time to practice.
- It was great. Instructor offers valuable feedback and explains why the technique should be adjusted. I am so glad that I was able to experience the Sim Lab.
- The OR experience was detailed and well thought out.
- This experience was very helpful and made me feel more comfortable for my first day.
- Very realistic, helped to build confidence in "safe" environment.

Implications

Operating Room orientation programs are an important factor in nurse retention.^{3,4} Skills laboratories and simulation scenarios should be built into these programs.^{3,4} Simulation education is one method that can be used to increase the knowledge, skills, and confidence of perioperative staff.



Acknowledgements

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References

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