ABSTRACT

For associate degree nursing students at Eastern Kentucky University, Richmond, the perioperative nursing clinical experience typically included a one-day observation of a surgical procedure, with students entering the OR suite after the surgery started and having to leave before the surgery was completed. An associate professor of nursing and a perioperative staff education coordinator partnered to address this lack of a complete perioperative experience for students and offer a more formal OR experience. The clinical experience was altered to provide relevant didactic perioperative nursing content in class before the clinical day, a group orientation, and observation in the preoperative, intraoperative, and postoperative areas. Reactions of students and perioperative staff members to these changes were positive. AORN J91 (March 2010) 383-389. © AORN, Inc, 2010

Key words: nurse educator, nursing student, perioperative clinical observation.

In postconference meetings, nursing students at Eastern Kentucky University, Richmond, who were doing their clinical rotations often commented, “My operating room experience was a waste of time. All I did was change into scrubs and enter a surgery and watch what was going on the best I could. Then I had to leave to come back to the floor.” Before Fall 2005, nursing student experiences in the intraoperative setting of this university-affiliated medical center consisted only of a chance to watch a surgical procedure. Students went to the OR during one of their scheduled medical-surgical clinical days without ever seeing the OR suite previously, and no formal objectives were established by the school for the students’ clinical day.

Typically, a nursing student’s OR experience consisted of arriving in the OR suite at 7 AM and being assigned to observe in an OR. The nursing staff educator gave a brief introduction to the expectations for the day (eg, observe the sterile field, where to stand to see the procedure), then the student changed into scrubs and went to the OR to observe, often after the patient was already anesthetized. The student only sometimes had the opportunity to observe an entire surgery, depending on the procedure, because the student had to change into his or her uniform and report back to the regular unit at 11:30 AM. This experience gave only a brief glimpse of what intraoperative nursing and perioperative patient care are all about.

The problem with this observation format is that it became strictly an anatomy lesson. The
students were not able to meet or interact with the patients, and the patients were viewed only as bodies on a table. The interaction with the nursing staff members also was limited. When the patient is in the OR, staff member focus is directed to the patient, so little time and attention can be given to a nursing student who is there to observe. The students also did not get a chance to use any of their nursing assessment skills. Before the surgery, the students were not given the chance to assess a patient’s level of understanding of the procedure or the patient’s physiologic status. After the surgery, the students were not present to see how the patient had tolerated the procedure. The students clearly were not getting the best experience from their limited opportunity to observe perioperative nursing.

**IMPROVING STUDENT OBSERVATIONS IN PERIOPERATIVE NURSING**

In 2005, a new perioperative staff education coordinator with a background in preoperative and postoperative nursing and a professor of nursing new to the clinical site decided to try to improve the clinical experience. They wanted to create a more formal perioperative experience for the students. Working together, they set out to make some changes.

First, they conducted a literature search with assistance from a medical librarian to look at current perioperative experiences for nursing students. The search revealed that several nursing programs offer intensive perioperative nursing exposure through elective or nonelective clinical learning opportunities.¹⁻⁵ The one-day perioperative experience schedule could not be altered because of multiple constraints within the nursing program and at this facility, including limited clinical time for the students, the need to rotate many students through the perioperative area, and the ability to accommodate only a small number of students on any given day.

Despite the constraints, the educators knew they had the power to improve the perioperative nursing experience for the students, and their conversations resulted in numerous changes to the program. The perioperative staff education coordinator made the on-site changes to the clinical experience with approval from the perioperative management team. The nursing professor did not need approval for the revised observation experience because the perioperative observation experience was already approved by the nursing school’s curriculum committee.

**Didactic Content**

Before any clinical OR rotation, visiting students now receive relevant didactic perioperative nursing content in their nursing curriculum, which is endorsed by the perioperative staff education coordinator. This content is briefly outlined as follows:

I. Perioperative Nursing Management
   a. Define the role and responsibilities of the nurse and apply these to clinical situations.
   b. Differentiate between the types of surgeries and risk factors for surgical procedures and anesthesia.
   c. Develop a preoperative teaching plan designed to promote recovery.
   d. Describe the purpose of various preoperative medications.

II. Intraoperative Nursing Management
   a. Describe the OR environment and interdisciplinary team member roles.
b. Use the nursing process for optimizing patient outcomes.
c. Describe basic principles of the aseptic technique used in the OR.
d. Identify types of anesthetic agents, their uses, and their advantages and disadvantages.
e. Discuss the nursing responsibilities and rationale for using adjuvant medications.
f. Discuss special considerations for children and older adults.

III. Postoperative Nursing Management

a. Describe the responsibilities of the postanesthesia care unit (PACU) and floor nurses.
b. Identify components of a focused assessment of a postoperative patient.
c. Identify common postoperative problems and their nursing management.
d. Discuss the nurse’s role in preventing postoperative complications.

Group Orientation

For the clinical OR observation, the nursing students’ experience was altered to start with a group orientation to the perioperative environment. By addressing all the students in a classroom setting, the perioperative staff education coordinator can discuss in detail the areas the students will see on their clinical observation days. The students are given a clearer idea of the processes and become more aware of a patient’s entire surgical experience.

This group orientation takes place on a separate day before the OR clinical experience. On the orientation day, the group is brought to the OR classroom where they are given a handout that briefly outlines the basic policies of the department, such as dress code and traffic patterns. Students also receive a one-page observation guide that includes reminders for them, such as to eat breakfast before coming to the OR, what time they should arrive, and tips for the day of surgery. Tips include introducing themselves to perioperative staff members, letting staff members know their objectives for the day, and what to do if they feel faint or sick. Students are encouraged to keep the handout to review the night before their OR observation.

Brief instruction about different staff member roles, patient populations, and types of regularly performed procedures leads to a discussion about any previous OR experiences the students have had and what they are interested in seeing. Also, during the orientation, the students watch a video from the AORN Perioperative Nursing Library, *This is Perioperative Nursing,* which portrays the surgical environment and staff member roles. Although this video is dated, the content is relevant and thorough.

The perioperative staff education coordinator also thought it important for the students to have knowledge of the basics of the environment to allow them to feel more comfortable during their observations. During the orientation, the students tour the surgical areas. Students change into scrubs and visit the intraoperative suites as well as the preoperative and postoperative areas. After their OR orientation, students are assigned a specific date for their perioperative observation.

The associate professor of nursing established formal learning objectives for the experience. These objectives are given to the students when they attend the OR group orientation. During his or her clinical experience in the operating suite, the student will observe

- the patient during the induction and the progression of general anesthesia,
- strict sterile technique maintained by perioperative personnel,
- the team collaboration and roles of all perioperative personnel,
- patient placement for surgical procedures and exposed anatomy, and
- the patient as he or she recovers from anesthesia.

Observation Day

A perioperative observation day occurs during the students’ five-week medical-surgical rotation. The observing students go to the OR for the
perioperative observation experience instead of spending a typical day on their assigned unit (eg, oncology floor). Typically, one to two students attend each perioperative observation day and each follows one patient; only one student is allowed to observe in an OR at a time.

The way the observations are now conducted, the student arrives at 6:30 AM and meets with the perioperative staff education coordinator. After the student changes into scrubs, the education coordinator reviews the surgical schedule. The student chooses a procedure from a small list of procedures that are deemed to be good learning environments. The list may include basic abdominal, laparoscopic, orthopedic, thoracic, or plastic surgery procedures. In addition to the student’s learning objectives, consideration is given to perioperative staff members’ needs.

The perioperative staff education coordinator takes the student to the preoperative area and introduces him or her to the patient and the preoperative nurse. Because the facility is a medical school-affiliated teaching hospital, the general surgical consent that patients sign includes permission for observers. The patient is told that he or she will have a student observer during the procedure; if the patient objects, then the student is given a different assignment.

The student stays with the patient in the preoperative setting and observes the assessment and data review. The preoperative nurse goes over the assessment and necessary paperwork required before surgery. The student is able to talk with the patient and meet any of the patient’s family members who may be present. The surgeon performs the surgical site marking in the preoperative area, and the student is able to see this process as well as meet the surgeon. The student meets the OR nurse in the preoperative area where they can discuss what will occur when the patient is initially taken into the OR. The anesthesia care provider is introduced to the student, and the student may observe the placement of epidural catheters or monitoring lines before the patient is taken into the OR.

After the preoperative preparation is complete, the student goes with the patient to the operating suite. As the patient is induced and prepped for surgery, the student quietly observes the process. Students are instructed during the initial clinical orientation day to ask questions and to interact with staff members, and they are encouraged to do so after the procedure has begun. The student is strategically placed so he or she can observe the procedure and interact with the surgical team members.

On completion of the surgical procedure, the student accompanies the patient to the PACU. The student stays with the patient until phase I discharge criteria are met, and, as instructed during the OR orientation, the student spends the time in the PACU and assesses the patient for postoperative issues, such as pain and airway patency. The student is able to witness the patient’s overall tolerance of the surgical procedure and anesthesia and is able to interact with the patient and assess his or her perspective on the surgery.

**RESPONSES TO THE IMPROVED PROGRAM**

As part of their perioperative nursing observation, the students are instructed to write a short paper about their experience. The objectives for this requirement, which the nursing professor gives to the students before the orientation day, are that the students will become personally engaged in their perioperative learning opportunities and
observant of the different perioperative nursing roles, will read and learn about a surgical procedure they were not familiar with, or will focus on the patient as the center of the entire process. Instructions for the paper include that it can be any length; can be typed or legibly handwritten; and should focus on one role of the perioperative nurse, the surgical procedure, or the process from the patient’s viewpoint. The students are told up front that their papers will be copied and shared with the perioperative staff education coordinator, members of the perioperative staff, and surgeons.

The student papers have varied greatly in style and content. Most of the papers are two typed pages that start with “Today I got to see . . .” and go on to briefly describe a surgical procedure. As with all assignments, however, there are a few students who excel and go beyond the instructor’s expectations, with creative and colorful writing styles and in-depth content that demonstrate the students’ insight into their perioperative observation experience. Examples from student papers include the following:

- “After studying perioperative nursing in class and then actually seeing it, all the information comes together and makes sense.”
- “This was an opportunity to put all that I have been learning into real scenarios, and this was the best anatomy lesson I have ever received.”
- “The surgery was everything I hoped it would be; blood was splashed, mallets were used, and an individual was given the chance at a better quality of life. I now have a better understanding of what it would be like to work in the OR, and I can mark this down as another positive learning experience.”
- “I loved being in the OR so well that it is now on the top of my list for areas which I would like to work in when I graduate and become a nurse.”

Reactions and observations from the perioperative staff members regarding having student observers in the OR are generally positive. Several staff nurses have said they became perioperative nurses because of their experience as a student. Some staff member comments about the experience include the following:

- The students are excited to see a surgical procedure, and they are able to see the teamwork of the OR staff members.
- Students relate well to patients when the students meet the patients before sedation and have met their family members.
- Students state they wish that they could stay longer in the OR or come back for another day.
- Some students say that they have just started to feel comfortable in the environment when it is time to leave.

The perioperative staff members also shared their reactions to the student papers they read. Some examples include that they

- are interested in seeing what the student’s impressions were,
- enjoy the student’s anecdotal reports of the procedures,
- have fun reading what the students write,
- appreciate seeing what they consider to be routine procedures through the students’ eyes, and
- notice that the students sometimes focus on the conversations they overhear.

One nursing student who went through this altered observation experience in 2007 is now working in the OR at this facility, and she volunteered to share her experience as a student in the improved observation program. In both verbal and written comments, the student said that she found the experience to be very helpful in giving her an overall feel for the role of the perioperative nurse by helping her better understand the classroom and lecture components.

She recalled aspects from each area of her perioperative day. She remembered the preoperative nurse emphasizing the importance of patients’ medical history, communicating with family
members, thinking about the types of laboratory
tests the patient might need that had not yet been
ordered, and using documentation as a way of
communicating with other members of the surgi-
cal team. During the surgery, she recalled the im-
portance of patient positioning; communication
among the anesthesia care providers, surgeon, and
staff members; the organizational skills used by
the circulating nurse;
and reporting the
patient’s status to the
PACU. After sur-
gery, she witnessed
the skills of the
nurses in prioritizing
care, the different
skill set of the
PACU nurse, and the importance of communi-
cating with family members in the waiting room.

Overall, this student had a positive experi-
ence on her clinical day and chose to come to
the OR as a new graduate where she has be-
come a valued member of the surgical team at
this facility. She attributes her transition to her
role as being aided by coming to work in an
area she had exposure to in school and having
some idea of what being a perioperative nurse
was all about.

Another former student who is now a nurse on
a medical-surgical unit reported that her experi-
ence in the OR has benefitted her patients and her
nursing practice. She has a clearer understanding
of the procedures her patients are getting ready to
undergo and that has improved her preoperative
patient teaching. She also understands why her
patients are in so much pain after surgery and is
sympathetic during their recovery.

**BENEFITS AND DRAWBACKS**
The benefits of redesigning the nursing students’
experience from an “OR day” to a perioperative
nursing observation have been many. From the
thorough orientation the students collectively re-
cieve from the perioperative staff education coor-
dinator to their actual observation day, the stu-
dents receive a more comprehensive introduction
to perioperative nursing.

The students participate in lectures on peri-
operative nursing in their nursing school class-
room, but actually observing these roles serves to
reinforce the didactic classroom education. The
students now experience the preoperative, intra-
operative, and post-
operative recovery
process as a whole.
The patients also
benefit as demon-
strated by their ver-
bal expressions of
relief to know that
someone (ie, the
nursing student) will follow them throughout the
surgical procedure and will be there when they
wake up in the PACU. The patients and their
family members view the student as a “constant”
during a potentially stressful experience, and the
student’s presence was reassuring for them. Pa-
ients reported waking up and looking for the
student, and, in informal surveys, patients have
stated that they appreciated having the student
with them.

Another benefit for students is that this experi-
ence serves to cement or even plant the interest
for them to pursue a perioperative nursing career
after graduation. Some students, however, realize
perioperative nursing is not for them, which can
serve to help narrow which nursing career path
they will follow.

The downside to the students’ observation day
experience is that they are not able to develop a
relationship with the RNs or the perioperative
staff members because the students are with each
person for a short period of time and their inter-
actions are brief. The students are also only as-
signed to one perioperative observation clinical
day, so their experience largely depends on the
particular surgery and surgical team they are able
to observe.
CONCLUSION
During clinical postconferences, students no longer bemoan their perioperative nursing experience. Instead, most eagerly report all that they observed and express a desire to go back to the OR. Improving the perioperative education that nursing students experience has proven to be beneficial to all involved. The students develop a deeper understanding of perioperative nursing and what the patients experience, the perioperative staff members appreciate seeing the OR through fresh eyes, and the patients have someone else with them throughout their perioperative journey. Collaboration between a nurse educator and a perioperative staff education coordinator has been instrumental in providing nursing students with the most beneficial clinical experiences possible.

References

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