during the scenario at various times, guiding learners’ thoughts and actions. Some facilitators stop the action of the scenario at intervals to allow a time for formal reflection-in-action.

**Postsimulation: Reflection-on-Action**

Debriefing is the process following a clinical simulation during which facilitators and learners review and evaluate the learning activity. Debriefing is an opportunity for intentional critical reflection on the simulation patient care experience. Consistent with Kolb’s (1984) experiential learning cycle, debriefing is the time for reflective observation that follows engagement in a concrete experience (simulation session). Kolb proposes that, subsequently, learners enter the stage of abstract conceptualization, followed by testing new theories in the stage of active experimentation.

Debriefing is a time for guided reflection by the facilitator and involves dialogue among the participants. The group process is important, as it helps the individual increase awareness of his or her own thinking and rationale and exposes each person to the ideas of others, which helps develop professional boundaries and identity (Esterhuizen & Freshwater, 2008).

This reflection-on-action (Schön, 1983) is a retrospective process that promotes development of clinical reasoning and clinical judgment skills through reflective learning processes (Dreifuerst, 2009). Although reflection is considered an innate activity, great variability exists across learners in terms of the consistency and thoughtfulness in reflection that influence the value of the learning experience. Debriefing is a time to facilitate reflective processes for learners so that they gain maximum benefit from the learning experience (Decker, 2007).

Debriefing is critical to the learning experience of clinical simulation. Because simulation involves cognitive, psychomotor, and affective aspects, debriefing necessarily addresses all these components of the learning experience. It is a time to evaluate the thinking processes, interventions, and behaviors that occurred and to consider the emotions that were evoked by the scenario and by involvement in the learning activity.
Ideally, debriefing occurs immediately following the simulation (Cantrell, 2008; Wotton, Davis, Button, & Kelton, 2010). Facilitators should devote adequate time to this activity. Some experts have proposed that the length of debriefing should be at least equal to the time of the actual scenario (Fanning & Gaba, 2007). It is ideally held in close proximity to the simulation room (Arafteh, Hansen, & Nichols, 2010; Fanning & Gaba, 2007); learners are seated in a circle or around a table, so that all are at the same level without a sense of someone being in charge. If the simulation session was videotaped, facilitators can include review and critique of select video clips in the debriefing. The atmosphere of the debriefing should be nonthreatening and nonjudgmental to encourage learners to share openly and honestly without fear of recrimination. When debriefing begins, learners are informed about role delineation, timeframe, and format (Arafteh et al., 2010; Mayville, 2011).

"Debriefing is a rich environment for reflective practice and can be as simple or complex as demanded by the educational design."

Debriefing can be structured or unstructured. Facilitators can lead it, or the learners themselves can lead it. Most often, it occurs as guided reflection in which facilitators provide leading questions for learners to consider. Facilitators can approach it in a chronological manner, reviewing what happened from beginning to end, or they can allow it to begin with thoughts that might first come to mind. Beginning with positive aspects of the scenario can set the stage for more open dialogue than an initial critique of what can be improved. Open-ended questions are the hallmark of structured debriefing. Facilitators should ask the learners to consider such things as what went well during the scenario and what they could have done better.

Using the nursing process to guide the discussion, learners can reflect on the various components of care from assessment to evaluation. Designing the debriefing around a familiar framework such as the nursing process enhances assimilation of the knowledge, skills, and attitudes into practice and helps the learner transfer the learning to future clinical situations (Dreifuerst, 2009).
As a part of debriefing, facilitators can review key points related to care of the patient with the particular problems encountered in the scenario. They can focus the discussion on a specific disease or condition, pertinent nursing assessments and interventions, lab tests, medications, or other key issues. Additionally, they should guide learners to reflect on patient safety concerns and how well they accomplished the related QSEN competencies, such as patient-centered care, teamwork and collaboration, and safety. Facilitators should prompt learners to consider if they dismissed important patient data because they had already made a decision about what was going on, which is defined as \textit{premature closure}. Debriefing is a rich environment for reflective practice and can be as simple or complex as demanded by the educational design.

Debriefing provides an avenue for learners to experience emotional release. Simulation learning activities can trigger a variety of emotions for the learner. According to Schön (1983), emotion can enhance learning as it frames the experience, yet it can impede learning if it causes the learner not to fully engage in the experience. The nature of simulation asks learners to suspend disbelief and to treat the scenario and manikin as if they were real. Some learners find it more difficult than others. Some learners encounter anxiety when participating in clinical simulation, which can interfere with learning. Learners need the opportunity to express their feelings about participating in the scenario. This emotional release can help clear the pathway back to reflective learning (Dreifuerst, 2009).

Though the process of debriefing provides opportunity for reflective practice for educators and learners, further evaluation of simulation continues after the activities have concluded. Following simulation learning activities, educators engage in reflective practice as they consider learner feedback and comments regarding the simulation scenarios. In an effort to improve subsequent scenarios and enhance learning, educators might reflect individually and collectively on their perceptions of the learning activities. They develop ideas on how to edit the scenarios and facilitate learning, and might identify specific areas around which to develop other scenarios. Viewing videotaped simulation sessions can provide
additional insights for educators as they reflect on the value of the learning experience for the learners and recognize areas for improvement (Fanning & Gaba, 2007).

Educators can assign other reflective activities following simulation as an adjunct exercise. Reflective journaling about the clinical simulation provides written evidence of learner responses to simulation. Learners might be asked to answer specific questions, such as those used in debriefing, to guide their written reflection (Mayville, 2011). Learners might be asked to complete a self-assessment following clinical simulation, such as the one developed by Lasater (2007). The Lasater Clinical Judgment Rubric is based on the Tanner Model of Clinical Judgment (2006) and provides a frame of reference for learners to organize their thoughts in response to the clinical simulation.

Educators should be savvy in the blending of simulation strategies such as using the National League for Nursing’s Advancing Care Excellence for Seniors (ACES) with their simulation scenarios (http://www.nln.org/facultydevelopment/facultyresources/aces/index.htm). See Table 8.1 for an example. Additionally, when educators are trying to convey the impact of patient safety, they might find it meaningful to use the video clips of Helen Haskell telling the story of her son Lewis Blackman’s untimely death due to medical errors to assist learners in reflecting on the impact of errors (qsen.org). The reflective questions that accompany each video clip can be used as seminar discussion, reflective paper, or reflective journaling.

TABLE 8.1: Teaching Block: Advancing Care Excellence for Seniors (ACES) Case Study and Simulation: Henry & Ertha Williams

The educator may select the ACES Unfolding Case Study that fits best with their objectives http://www.nln.org/facultydevelopment/facultyresources/aces/unfolding_cases.htm

REFLECTION-BEFORE-ACTION (PRESIMULATION):
Provide learners with readings on the pathophysiology and nursing care of patients with COPD, Alzheimer’s, and potential health and lifestyle issues experienced by older adults.
CHAPTER 8: Integrating Reflection in Simulation

Request that learners review the following assessment tools:

**SPICES** is an acronym for the common syndromes of the elderly requiring nursing intervention:

- S is for Sleep Disorders
- P is for Problems With Eating or Feeding
- I is for Incontinence
- C is for Confusion
- E is for Evidence of Falls
- S is for Skin  (http://www.nursingcenter.com/pdf.asp?AID=74387)

**Geriatric Depression Scale**  
(http://www.nursingcenter.com/library/journalarticle.asp?article_id=744981)

**Modified Caregiver Strain Index**  
(http://consultgeriirn.org/uploads/File/trythis/try_this_14.pdf)

**Beers Criteria for Potentially Inappropriate Medication Use in Older Adults**  

**Generalized Anxiety Disorder 7 (GAD-7)**  
(http://www.psychiatrictimes.com/all/editorial/psychiatrictimes/pdfs/scale-GAD7.pdf)

Assign one learner to prepare for and assume the role of the patient’s wife (Ertha).

Assign one learner to prepare for and assume the role of the patient’s daughter-in-law (Betty).

Request that learners listen to the audio file story of the patient, Henry  (http://www.nln.org/facultydevelopment/facultyresources/acces/Henry.wav) and reflect on what he is saying: What are his concerns (QSEN competency: patient-centered care)? Request that learners prepare a list of their concerns and areas they feel are important for assessment and intervention as they reflect on the situation. Prompt them to integrate issues that might be facing this family as senior adults. (This will be their admission to the simulation.)

**REFLECTION-IN-ACTION (INTRASIMULATION):**

Program the simulator to exhibit COPD. (Note there are three phases to the simulation: Simulation 1 is an acute hospitalized event, but the simulation can continue as a case study.)

continues
Instruct learners to collaborate as a team and to use appropriate communication techniques such as SBAR (Situation, Background, Assessment, Recommendation), CUS words (I am Concerned about..., I am Uncomfortable with..., This is a patient Safety issue), etc.

Primary nurse delegates task, including completion of assessment forms he or she feels are indicated.

Learners provide care as indicated.

Erlha and Betty enter at different times, and learners need to continually reflect on the situation, clinical indicators, and dynamics of the relationships.

REFLECTION-ON-ACTION (IMMEDIATE POSTSIMULATION):
Use reflective questioning to prompt learners to reflect on their nursing care of Henry, his wife, and his daughter-in-law.

Allow time for learners to discuss the assessment forms, implementation, data obtained, and plans for patient care.

Have learners reflect on how what they have learned/experienced in this simulation will impact their future care of patients.

REFLECTION-BEYOND-ACTION (INTEGRATION OF KNOWLEDGE FOLLOWING SIMULATION):
Request that learners complete the “finish the story” assignment as a way to further reflect from the patient’s point of view about his health and caregiver responsibilities.

Encourage students to share with the course coordinator when, in clinical, they use lessons learned from this simulation.

Reflection Beyond the Simulation

Though reflection is commonly considered to occur during (reflection-in-action) or following (reflection-on-action) the simulation, Dreifuerst (2009) proposes that a critical aspect of reflection occurs following the experience. Reflection-beyond-action represents the process of assimilating and integrating the knowledge, skills, and attitudes into one's conceptual framework for nursing practice. As learners’ repertoire of experiences continues to grow, they have greater opportunity for reflection and intellectual growth.
Final Reflections

Learning is complex; it is not adequate to just complete a simulation scenario. Simulation is a fertile field for changing practice when reflection is designed as an inherent part of the learning experience. To maximize the impact of educational experiences to build knowledge, educators must give learners the opportunity to reflect before action (presimulation), in action (intrasimulation), on-action (immediately postsimulation debriefing) and beyond action (integration of knowledge following simulation that can occur days, weeks, or a longer time afterward. It is encouraging to note that the educator can build on scenarios they have already developed. Engaging in reflective practice themselves, educator can create meaningful reflective activities for the learner in the four phases of simulation. Training professional learners to utilize reflection can transform their clinical practice and the effectiveness of their patient care. Throughout the reflective educational process, the focus should remain on the quality and safety of patient care.

References


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