In this issue, we feature two contributions that address issues of concern to staff development educators in two specialty areas: intensive care and neonatal care. Thanks to Kathleen McCarthy and Ruth Smillie for these contributions. I hope you find these ideas useful. Whether you are in these specialties or others, you can adapt them to your own nursing professional development practice.

**IMMERSING NEW GRADUATES IN MEDICATION SAFETY**

The step-down intensive care unit nurse manager identified a learning need for a group of new graduates: infusion therapy. Once the nurse manager identified this learning need, this educator needed to build a meaningful learning experience. The choice was made to use simulation to immerse the graduate nurse in the learning experience to explore safety processes, perform double checks, use resources, and recognize the potential “what ifs” in initiating, maintaining, and titrating infusions.

Simulation is recognized as a situation modeled to create a real situation. Rauen (2004) identified the value of simulation as the opportunity for staff to “think on their feet,” especially for those working on units where acute patient condition changes can occur at a moment’s notice.

This facility uses electronic health record (EHR) and computerized physician order entry, smart pumps for intravenous infusion therapy, and bar-code scanning technology for medication administration. Additional resources remain accessible to all nursing staff, such as the “Virtual Library,” EHR-test environment, and policies available via the intranet. A “tracer” method using short case studies was developed for each of the following infusions: insulin, heparin sodium, Cardizem, nitroglycerin, and nitroprusside. Patient safety concepts, policies, and technology that the nurses would use were built into the simulation.

The case studies for each of these infusions were placed on a 4 × 6 in. card created as a printed document and included an electrocardiogram rhythm strip if appropriate. Once the case studies were developed, the educator used the EHR-test environment to provide a visual to the learner and in identifying physician orders, as they would normally appear in the EHR. Practice orders were created for each of the infusions. Additional props that would be needed to make the experience real to the learner were identified.

Questions were developed in advance, including those on medication use, side effects, patient teaching, adverse events (recognizing and reporting), documentation, initiation of infusions, physician notification, potential errors, and the proper use of smart pumps (Henriksen et al., n.d.). Educators generally have access to patient equipment such as IV pumps and tubing. A challenge to overcome for this program was mock infusions. This educator was able to work with the hospital pharmacist to create mock infusions with labeling, as labels would appear when the medication was ordered for a “real” patient.

Assembly of the props or items needed for the simulation and a mock trial must occur prior to the “live” learner experience to ensure that the activity will proceed smoothly. Changes can be made as a result of the mock trial. The next important step is scheduling dedicated time for the learner to proceed through the simulation, away from patient care assignments.

On the day of the activity, this educator chose to go to the nursing unit break room as the nurse could easily access the activity at a scheduled time. It is important to begin with simple (common) infusions then move to complex ones. Explain the purpose of the activity and the expected response. Use questions and answers to facilitate understanding and explore clinical reasoning capabilities. It is vital to offer the learner the opportunity to ask questions and clarify understanding of safe practice, resources, and policies. The facilitator should actively listen and be attentive while the participant thinks through the processes and responds.

Reinforcing safe practices and identifying that no harm can result from this practice session is valuable.

At the conclusion of each case scenario, a short debriefing exercise identified what was done well and what additional work was needed for safe practice. The nurse manager received written feedback regarding the participants’ successes as well as challenges during the exercise.

The participant and educator identified a plan for future practice with infusions and openly briefed preceptors after the exercise.

Participants and preceptors identified the value of this exercise. Nurses stated that “they had never seen many...
of the labels” or “were unfamiliar or lacked experience with some of the medications” and asked questions openly. They found the hands-on approach beneficial and were thankful to have had the opportunity before really needing to initiate or maintain infusions. This exercise also afforded time with the educator and an opportunity for the new nurse to identify the educator as a resource.

The experiential learning through simulation addressed a variety of learning styles while creating a safe learning environment. This exercise provided a “no-harm” experience where learners could make mistakes and understand processes to keep patients safe. The use of this simulated exercise provided the new nurse graduate an opportunity to demonstrate safe medication practices in a reality-based environment while building clinical reasoning skills.

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**References**


**A Mnemonic for Assessment of Respiratory Distress in Infants and Neonates**

Experienced nurses know that thorough respiratory assessment of sick neonates and infants is critical to their survival. Infants and neonates are more prone to respiratory distress by virtue of their anatomy. Smaller airways, a larger tongue and soft tissues, and a pliable rib cage increase the susceptibility of infants and neonates to respiratory distress even with mild illnesses. Infants and neonates with illnesses outside the respiratory system, like urinary sepsis or meningitis, will also show signs of respiratory distress. In fact, respiratory distress may be one of the first noticeable signs that the baby is ill. Therefore, accurate assessment of the respiratory system of the infant or neonate is the key to interventions and treatment. The importance of early identification of respiratory insufficiency and problems should be foremost in any pediatric assessment.

Nursing textbooks describe the many clinical manifestations of respiratory distress. These lists are inherently difficult to remember, so use of a mnemonic gives the list some meaning. The WET FROG mnemonic makes sense of these lists by helping the examiner to focus on the specific clinical signs of respiratory distress in newborns and infants.

- **W** is for wheezing. By listening with a stethoscope, high-pitched musical sounds indicate a narrowing of the airways.
- **E** is for effort. Head bobbing respirations, or visible contraction of the sternocleidomastoid muscles with inward movement of the supraventricular fossae during inspiration, indicate distress.
- **T** is for tachypnea. A respiratory rate (counted for a full minute) of over 60 breaths per minute for newborn to 2-month-old babies or over 40 breaths per minute for 2-month-old to a year-old babies reveals respiratory distress.
- **F** is for flaring. Nasal flaring is a widening of the external portion of the nose (the nares), which increases the airway size.
- **R** is for retractions. A dramatically visible sign of respiratory distress, the pliable, compliant rib cage in neonates and infants allows the chest to pull in with increasing respiratory effort.
- **O** is for oxygenation. Color is the best indicator of oxygenation. A bluish discoloration of the tongue and mucus membranes indicates a decline in oxygenation. (The hands and feet of infants are likely to show color changes that are not indicative of low oxygenation)
- **G** is for grunting. Grunting on expiration is usually a melodic, throaty sound. Grunting can be heard without a stethoscope. Parents sometimes notice the baby “talking” with each breath.

**Suggested Readings**

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