White Paper

Preparing Students for Human Patient Simulation Learning Activities





PREPARING STUDENTS FOR HUMAN PATIENT SIMULATION LEARNING ACTIVITIES

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First Steps for a Successful Simulation Experience

In 2008, Durham and Alden identified that "Human Patient Simulation . . . allows learners to develop, refine, and apply knowledge and skills in a realistic clinical situation as they participate in interactive learning experiences designed to meet their educational needs" (Durham & Alden, 2008 p. 3-221). For Human Patient Simulation (HPS) learning activities to be of maximum benefit to participants, facilitators, and students, tailored processes with in-depth training should be completed by all involved prior to the simulation.

The student portion of the guidance/training must include an understanding of the theory for the planned HPS learning activity and orientation to the HPS environment and simulator. An explanation of the roles and conduct during the HPS and debriefing should be provided by the facilitator or simulation coordinator/staff to all active and observing student participants.

Successful completion of pre-briefing and preparation helps the student gain a greater degree of realism, aids in reducing anxiety and stress, and increases confidence during the HPS learning activity. Studies are still being researched but early findings have shown that when faculty are prepared, and resources are available to deliver high-quality simulation, critical thinking skills, clinical reasoning, and knowledge of students are enhanced (Billings & Halstead, 2016, p. 27).

This paper presents preparation guidelines for an optimal HPS student experience.

What is Pre-briefing?

The pre-briefing phase of simulation occurs before the HPS begins and is the designated time where learners gather data and reflect on next steps. INACSL Standards of Best Practice: SimulationSM Simulation Design, Criterion 7 states that a written or recorded pre-briefing plan should be required for simulation-based experiences when used for high-stakes evaluations. According to Page-Cutrara, "The role of pre-briefing in developing students' abilities to notice aspects of the clinical situation, anticipate patient needs, and focus on the application of existing knowledge to meet simulation objectives may be beneficial for forming essential skills such as clinical judgment and thinking" (Page-Cutrara, 2014, p. 140).

Depending on the program and the simulation, the pre-briefing can take place as far as 24-48 hours prior to the HPS activity or as little as 15 minutes prior to the HPS activity. The amount of time allotted for pre-briefing will be based on the requirements of the HPS learning activity.

Student Pre-briefing

Students should complete pre-briefing for the HPS experience in the same way they prepare for the clinical patient care experience. This includes appropriate attire, a basic knowledge of the material, and behavior that is in accordance with expectations of an authentic clinical environment. Students who will be active in the HPS should be provided a badge that identifies their role in the HPS environment. Providing this information in advance allows the student to dress appropriately and arrive prepared to immerse themselves in his/her assigned role.

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Readings, thought-provoking questions, and a quiz can be given prior to the arrival to the HPS lab as a review of the basic knowledge of the material. Activities immediately prior to the scenario can include a review of the learning objectives, orientation to the HPS environment, a general overview of each role and expectations, the Situation, Background Assessment, Recommendation (SBAR) briefing, review of health care provider's orders, prescriptions, previously completed system assessments, etc.

During pre-briefing, students should also be taught to clarify their expectations of learning and to acknowledge that the scenario is a realistic situation. It is also recommended to provide your program's basic rules and guidelines for everyone to follow during the HPS experience. These may include:

- Positively supporting each other and not being overly critical during the HPS learning activity
- Agreeing as a group on when to ask the facilitator for more information
- Agreeing as a group when there is a need for a "pause" in the HPS learning activity

Taking these steps prior to the HPS experience have been shown to benefit the student experience during the HPS activity.

Sometimes, certain skills need to be performed during the HPS learning activity. In this case, a preparatory activity known as a skill-centered mini-HPS should be conducted. Completing the skill-centered mini-HPS prior to the HPS learning activity can allow students to not focus entirely on the application of the skill. Students can better employ critical thinking during the HPS activity when their thought process is not focused on the application and memorization of the skill steps.

Assigned Roles in a HPS Learning Activity

Participants can take the role of "active" or "observer" in the HPS learning experience. The active nursing role can be broken into several parts (i.e., primary nurse, medication nurse, documentation nurse, provider call nurse, etc.) in order to have as many students as possible take part in an active role during the HPS learning experience.

Below, are brief descriptions of some active nursing roles:

- **Primary nurse:** Responsible for providing proper care by using clinical knowledge gained from class lectures, reading materials, the patient chart, and the assessment of the patient.
- Medication nurse: Responsible for administering medication based upon the orders given.
- **Documentation nurse:** Responsible for recording any important information about the patient, care provided, reactions to care, etc. in the patient's chart.
- **Provider call nurse:** Responsible for calling the health care provider (played by one of the simulation staff) and receiving new care orders to relay to the team.

Other active roles may include the role of family members, and in some nursing programs, other discipline roles are assigned (for example, pharmacy or social work).

Observers also have an important role in the HPS learning experience. They should be advised to strongly focus on the processes of attention, retention, production, and motivation as they carry out their role in the experience. As an observer, it is vital to pay attention to what is happening, recognize the observed behavior, and retain this information for use when required. As it relates to production, it is important that observers are capable of physically and intellectually producing the same activities so when they are given one of the active roles they are able to step in to complete the tasks.

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Motivation is an important process that must be conveyed because observer students must understand their observations are important. Observers should be provided with an observer evaluation rubric tool to document their observations during the HPS learning activity. The rubric becomes a key piece to debriefing and allows observers to realize that observing is a meaningful exercise.

In relation to role assignment, the keys to having a meaningful HPS experience are to pre-plan which student will be assigned to each designated role, establish responsibilities for each assigned role, instruct the observer on the four processes of attention, retention, production and motivation that should be followed while observing, and provide participants their role prior to the start of the HPS learning activity.

Goals and Outcomes

The goal of an HPS learning activity is to allow students to critically analyze their own actions (or failure to act), reflect on their own skill sets and clinical reasoning, and critique the clinical decisions of others (Alexander et al., 2015). Simulation promotes active learning by allowing students to practice their nursing knowledge and skills which results in enhancement of critical thinking skills. These student-centered learning experiences develop students' ability to gain a deeper understanding of the lectured material and prepare for clinical experiences that may not occur frequently.

As it relates to the simulation facilitator's expectations concerning student preparation for the HPS learning activity, the facilitator should expect the student to come to the experience with a mindset to synthesize the core concepts, perform the appropriate critical thinking, decision-making, interpersonal and psychomotor skills, and immerse themselves in the experience as a realistic representation of a clinical case.

By providing students with the proper processes and preparation for the HPS learning activity, they can be better equipped to be a productive part of the HPS Learning Activity and better prepared for their clinical experiences.

References

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