

Utilizing simulations to teach acute care of injuries and illnesses
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Context: Due to their educational benefit, simulations have been utilized in nursing and medical education to provide lifelike educational experiences for decades. Simulations provide safe practice of patient care skills learned during didactic education. Many acute care injuries/illnesses are life-threatening (e.g., suspected cervical spine injury, sudden death) and rarely occur during clinical education. **Objective:** To describe how simulations can be used to provide formative acute care injuries/illnesses experiences. **Background:** A simulation engages learners in a lifelike experience, with varying levels of fidelity or authenticity to mimic real clinical encounters. Research in nursing and medical education has demonstrated simulations increase clinical performance, critical thinking, motivation, and confidence. Devices such as partial-task trainers (e.g., rectal trainer) and/or simulators (e.g., SimMan™, iStan™) which emulate real patients (e.g., heart, lung, and bowel sounds, vital signs) are utilized during simulations in place of real patients. Following a simulation, immediate feedback is provided, which gives simulation an advantage over other teaching methods. It has been reported the types of injuries/illnesses occurring during clinical education do not always correlate with progression through courses. Simulations can provide practice of patient care skills, which allows blending of didactic and clinical education that may not happen otherwise. **Description:** For the last six years, our senior athletic training students in the General Medical course participate in four different simulations: heat stroke, sudden death, shock, and pneumothorax. Students are randomly separated into four groups with three to four students per group with the following roles: one group voices the patient through the simulator (SimMan™), one group provides patient care, one group acts as Emergency Medical Services, and one group observes. Students engage in all four roles of the simulation over the course of the semester. An instructor observes and provides verbal confirmation of information when needed (e.g., temperature of patient). The simulation can be paused by the students or instructor if patient care is compromised as would happen in a real life situation, or if students have questions, which would not be possible with an actual patient. Following each simulation, all students participate in a debriefing session to discuss their feelings, thought process, and reflect back on successes, challenges, and future patient care behaviors. **Clinical Advantage:** Simulation provides students the opportunity to practice essential communication, physical examination and clinical decision-making skills any time during their didactic and clinical development. Simulations are driven by the learning needs of the student and can provide deliberate patient care encounters for all students. This method provides students an opportunity to practice as close to real life situations as possible before they enter the workforce. Many students may not have experience in managing certain acute care injuries/illnesses, which may not occur often but are critical to patient survival. **Conclusion:** Though simulations are not widely used in athletic training, nursing and medical education have demonstrated their educational value. By engaging in simulations, students are provided with a safe, realistic experience and can receive immediate feedback, thus increasing confidence and enhancing learning. **Key words:** deliberate practice, emergency care

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