Simulation-based Learning: Is this the future of athletic training education?

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**Context:** Human patient simulation (HPS) has become an emerging education intervention for many health care professions including medicine, nursing, physical therapy, and athletic training because it allows for repeated instruction and practice without risk to actual patients and does so in a manner that can be made to replicate the real world setting. **Objective:** To develop simulation learning activities that mimic patient cases, particularly high risk and/or low frequency cases that students may not encounter in the clinical setting. **Background:** The repetition of patient care experiences in a real world setting through simulation is a direct application of Kolb’s Experiential Learning Theory (knowledge is created through experience) and Lave’s Situated Learning Theory (learning transfers from the training setting to the performance setting best, the more closely the two are aligned with one another). The work of Erickson suggests that the principle component in developing expertise in any discipline is the opportunity for deliberate repetitive practice with directed feedback. Unlike clinical experience alone, simulation allows for endless replications of clinical scenarios – especially critical but less frequent patient events. **Description:** Effective simulation incorporates two key components: the simulation scenario and debriefing of the learner’s engagement in the simulation. Simulation learning activities are constructed to mimic patient cases, conditions, and/or complications that occur in clinical practice and may be designed for individuals or teams. Although task trainers, standardized patients, and/or high-fidelity manikins are often used to create an active, experiential student learning opportunity, simulation-based learning can be achieved without costly equipment. Simulation provides the student with a safe environment to apply his/her knowledge and skills and learn from mistakes but without harm to patients. Following the simulated learning activity, the student reflects on his/her performance in a debriefing session facilitated by the instructor. Debriefing may be conducted in a number of ways, including class discussion and video analysis. The debriefing session allows the student to evaluate his/her clinical performance to recognize areas of strength and areas in need of improvement. **Clinical Advantage(s):** HPS has become increasingly popular because it allows for repeated instruction and real world practice without the risk of harming actual patients. The effectiveness of HPS lies in its ability to replicate real world experiences in a controlled, fully interactive environment. The most critical issue in any type of learning environment is how well learning is transferred from the education setting to clinical practice. **Conclusion(s):** A growing body of research suggests that simulation is an effective tool for educating health care professionals. Simulation is an appropriate, and necessary, education intervention for athletic training. **Key Words:** simulation, experiential learning, situated learning. **Word Count:** 430