Trauma training in simulation: translating skills from SIM time to real time.

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BACKGROUND:: Training surgical residents to manage critically injured patients in a timely fashion presents a significant challenge. Simulation may have a role in this educational process, but only if it can be demonstrated that skills learned in a simulated environment translate into enhanced performance in reallife trauma situations. METHODS:: A five-part, scenario-based trauma curriculum was developed specifically for this study. Midlevel surgical residents were randomized to receiving this curriculum in didactic lecture (LEC) fashion or with the use of a human performance simulator (HPS). A written learning objectives test was administered at the completion of the training. The first four major trauma resuscitations performed by each participating resident were captured on videotape in the emergency department and graded by two experienced judges blinded to the method of training. The assessment tool used by the judges included an evaluation of both initial trauma evaluation or treatment skills (part I) and crisis management skills (part II) as well as an overall score (poor/fail, adequate, or excellent). RESULTS:: The two groups of residents received almost identical scores on the posttraining written test. Average SIM and LEC scores for part I were also similar between the two groups. However, SIMtrained residents received higher overall scores and higher scores for part II crisis management skills compared with the LEC group, which was most evident in the scores received for the teamwork category (p = 0.04). CONCLUSIONS:: A trauma curriculum incorporating simulation shows promise in developing crisis management skills that are essential for evaluation of critically injured patients. PMID: 18301184 [PubMed - indexed for MEDLINE]