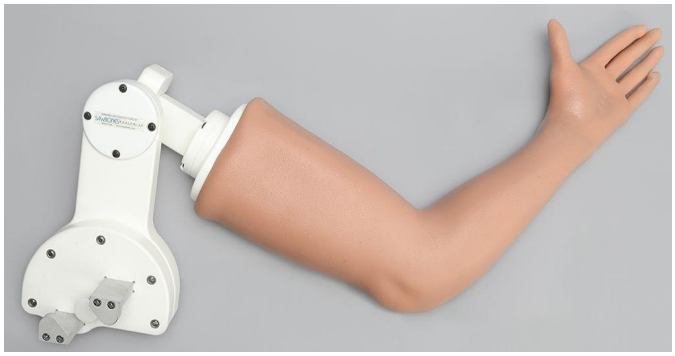

Image 1.

33 Medical Simulation Training on Trauma-Informed Care in the Emergency Department

Caroline H. Lee, Carlos Dos Santos, Taylor Brown, Henry Ashworth, Jason Lewis

Learning Objectives: To describe a novel simulation training developed to teach Trauma-Informed Care principles and applications for patient care in Emergency Medicine. To present results from pre- and post-surveys about effectiveness of simulations to learn and apply Trauma-Informed Care in acute-care settings.

Introduction/Background: Emergency Medicine physicians often care for patients experiencing direct sequelae from traumatic events including abuse, discrimination, and violence. Trauma-Informed Care (TIC) is a framework that recognizes the prevalence of trauma, promotes patient empowerment, and aims to minimize retraumatization. Limited curriculum on TIC in acute-care settings exists despite its widespread utility, with medical simulations (SIM) presenting a novel educational opportunity for this aim.

Educational Objectives: Describe principles of TIC and its importance in clinical practice. Present strategies for performing TIC-guided history taking and physical exams. Discuss situations when trauma screenings are indicated for patient safety and care. Facilitate the practice of TIC in acute-care settings.

Curricular Design: An SIM workshop reproducing relevant clinical encounters was developed for medical students to practice implementing TIC in the Emergency Department (ED). Students attended a didactic on TIC fundamentals and its applications in clinical care. Small groups then interacted with three SIM cases caring for patients with urgent medical needs and pertinent history related to intimate partner violence, transgender health, and discrimination in the healthcare system.

Impact/Effectiveness: Application of TIC principles is essential to providing patient-centered care in the ED. A pilot group of 12 students participated in these SIM sessions. The workshop was well-received, as 100% of participants found simulation training "Very" or "Extremely Useful" in preparing to apply TIC in patient interactions, compared to 42% prior to the session ($p<0.05$). Students also developed relevant skills, as 42% of students felt "Very" or "Extremely Confident" in using appropriate TIC language during physical exams, compared to 0% initially ($p<0.05$). Overall, this novel intervention represents a feasible and effective session for teaching TIC skills in Emergency Medicine.

34 Teaching and Assessing Bag Valve Mask Ventilation to 4th Year Medical Students via Checklist

Aman Pandey, Mary McHugh, Meghan Michael

Learning Objectives: Create a checklist that is expert reviewed to teach BVM to 4th year medical students. Implement a curriculum to teach using the checklist and then assess performance with high-fidelity simulation.

Introduction: Bag-valve-mask ventilation (BMV) is an essential skill to master when teaching medical students basic airway management. Standardized checklists help teach and assess learners. A validated checklist for teaching BMV to medical students does not exist in the literature. Current standards typically involve teaching learners BMV skills on mannequins in static situations.

Educational Objective: Create a checklist that is expert reviewed to teach BVM to 4th year medical students. Implement a curriculum to teach using the checklist and then assess performance with high-fidelity simulation.

Curricular Design: A previously published checklist was improved upon using expert consensus of 10 EM and 10 anesthesia faculty. A 2-handed technique using an oropharyngeal airway was emphasized to maximize a novice's success. Senior anesthesiology and EM residents taught 200 4th year medical students using rapid sequence deliberate practice methods and the checklist. After achieving proficiency, they participated in a SIM case that required BMV. Video review was used to assess the students' skills with the checklist.

Impact/Effectiveness: We now have a standardized, expert reviewed checklist to teach BMV skills to 4th year medical students. While all students achieved proficiency using a static mannequin, many of the students' skills deteriorated in the high-fidelity simulation. For example, in the simulation, only 65% of students connected the oxygen to the wall correctly, 24% of students did not use the two-handed technique, and 81% of students did not correctly size and insert the oropharyngeal airway. Since our goal is to teach students BVM for use in the hospital environment, by collecting the high-fidelity simulation