CAN MEDICAL STUDENTS ACHIEVE SKILLS PROFICIENCY THROUGH SIMULATION TRAINING?


Department of Surgery, Southwestern Center for Minimally Invasive Surgery, University of Texas Southwestern Medical Center, Dallas, TX

BACKGROUND: Learning clinically relevant technical skills is a major objective of the surgery clerkship. The purpose of this study was to evaluate the feasibility and benefits of a proficiency-based skills curriculum during the eight-week third year clerkship.

METHODS: During one academic year, students (n=204) were enrolled in an IRB-approved, computer-based skills curriculum. The curriculum included bladder catheterization, breast examination, and knot-tying. Students were taught as single proctor sessions with a final global rating of proficiency. Self-training to achieve optimal acquisition of knot-tying skills may be more difficult to enforce.

RESULTS: For catheterization and breast examination, 100% of trainees (n=204) demonstrated proficiency. Self-rated comfort increased from 10% to 98% (p<.001) for bladder catheterization and from 38% to 90% (p<.001) for breast examination. For two-handed knot tying, 4.7% were proficient before training and 44.4% after training (p<.001) optimal acquisition of knot-tying skills may be more difficult to enforce.

CONCLUSIONS: Uniform achievement of proficiency is feasible for practiced group sessions (catheterization and breast examination). Self-training to achieve optimal acquisition of knot-tying skills may be more difficult to enforce. Simulation, objective assessors, and feedback may serve to enhance skills acquisition.