ABSTRACT

INTRODUCTION

The ACGME requires that all residents are competent in performing basic invasive clinical procedures. Although simulation models have been used in other programs to teach these skills to interns with the intent to provide training and skills attainment before learning and performing on real patients, a large scale, mandatory simulation training, in which every incoming intern must satisfactorily complete training in a simulation center, prior to starting their intern year, has yet to be described. We describe such a curricular intervention produced in our Simulation Center.

METHODS

A half-day, intensive curricular intervention for teaching the commonly performed invasive procedures was developed and implemented at the University Clinical Skills and Simulation Center (UCSSC). This was a program which every incoming intern had to satisfactorily complete during their orientation period. Interns from every residency program were involved. Faculty were likewise recruited from every residency program. Ten invasive and two non-invasive skills were taught using standardized checklist developed by the faculty. The faculty taught the skills and then directly observed each intern perform such skill on low fidelity models, using the standardized checklist. If the intern did not satisfactorily complete the individual procedure, remediation was provided. The procedures included internal jugular line placement with ultrasound guidance, subclavian line placement, femoral line placement, urinary bladder catheterization, nasogastric tube placement, suture and knot tying, lumbar puncture, thoracentesis, intubation, arterial line placement, sterile gowning and gloving and handwashing. Completed checklists were then forwarded to the learner’s program director. At the end of half-day session, a survey was completed by the learners regarding aspects of the sessions. The learner used a Likert scale in which 1 is strongly disagree, 3 is neutral, 5 is “strongly agree”.

RESULTS

Over a 3 day period in June, 2009 127 interns at Thomas Jefferson University Hospital received this training program in the UCSSC. Interns were from the Departments of psychiatry, pediatrics, emergency medicine, orthopedics, otolaryngology, neurosurgery, general surgery, family medicine, OB/GYN and internal medicine. All interns received hands-on skills instruction to perform the individual procedures on a low fidelity model. Each intern satisfactorily completed the training for each procedure. All interns completed a program answering questions graded by a Likert-type scale (1: Strongly disagree, 5: Strongly agree). The interns indicated that they had increased confidence in their skills (4.88) and that the overall assessment of the program was excellent (4.60).

DISCUSSION/CONCLUSIONS

We describe a standardized, reproducible, required skills attainment program for interns to learn common invasive procedures before beginning their intern year. Although logistically challenging, this intervention was smoothly produced and well received by the interns. Although their self-reported confidence improved, we will assess if indeed this program improves patient safety and quality in clinical care. We are currently developing a mechanism to study such outcomes.

REFERENCES: