

Simulation Based Clerkship Orientation Program for Medical Students

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INTRODUCTION

Increased demand for surgeons coupled with ever-decreasing interest in surgery as a career choice is creating a deficit in US surgical workforce. Active procedural participation is perceived as positive clerkship experience by students, who are more likely to opt for surgical careers. It is of utmost importance that patient safety is not compromised in an effort to retain bright medical students by allowing untrained novice trainee to engage in clinical activity. So we piloted a one day (nine hours) intensive Simulation based Clerkship Orientation Program (SCOP) for our second year medical students MS200.

METHODS

75 MS200 attended the SCOP on their first day of Surgery clerkship at Penn Medicine Clinical Simulation Center in 2 groups, January and April 2009. Students were divided into small group (6-8) to facilitate supervised (2 educators/group) interactive learning.

4 skills station(1.5 hr each) provided training on following skills:

1. Arterial puncture, venous blood collection and line placement,
2. Urinary catheterization & Nasogastric tube placement
3. Surgical scrubbing, gowning and draping, and
4. Knot tying and basic suturing skills.

The first 20 minutes were spent on interactive video based tutorials (NEJM and ACS educational videos) followed by practice to proficiency skills station. Actual equipment kits and partial task trainers were used for skills training. Upon completion all trainees were required to demonstrate basic proficiency in each skill.

Trainees rated their learning experience using a 4 point Likerts (4=strongly agree) feedback instrument. The course was funded by School of Medicine.

RESULTS

All trainees (100%) were able to receive the pre-clinical credentialing certificate, <5 % trainees required individualized attention to achieve this. Thirty nine students (52%) provided feedback.

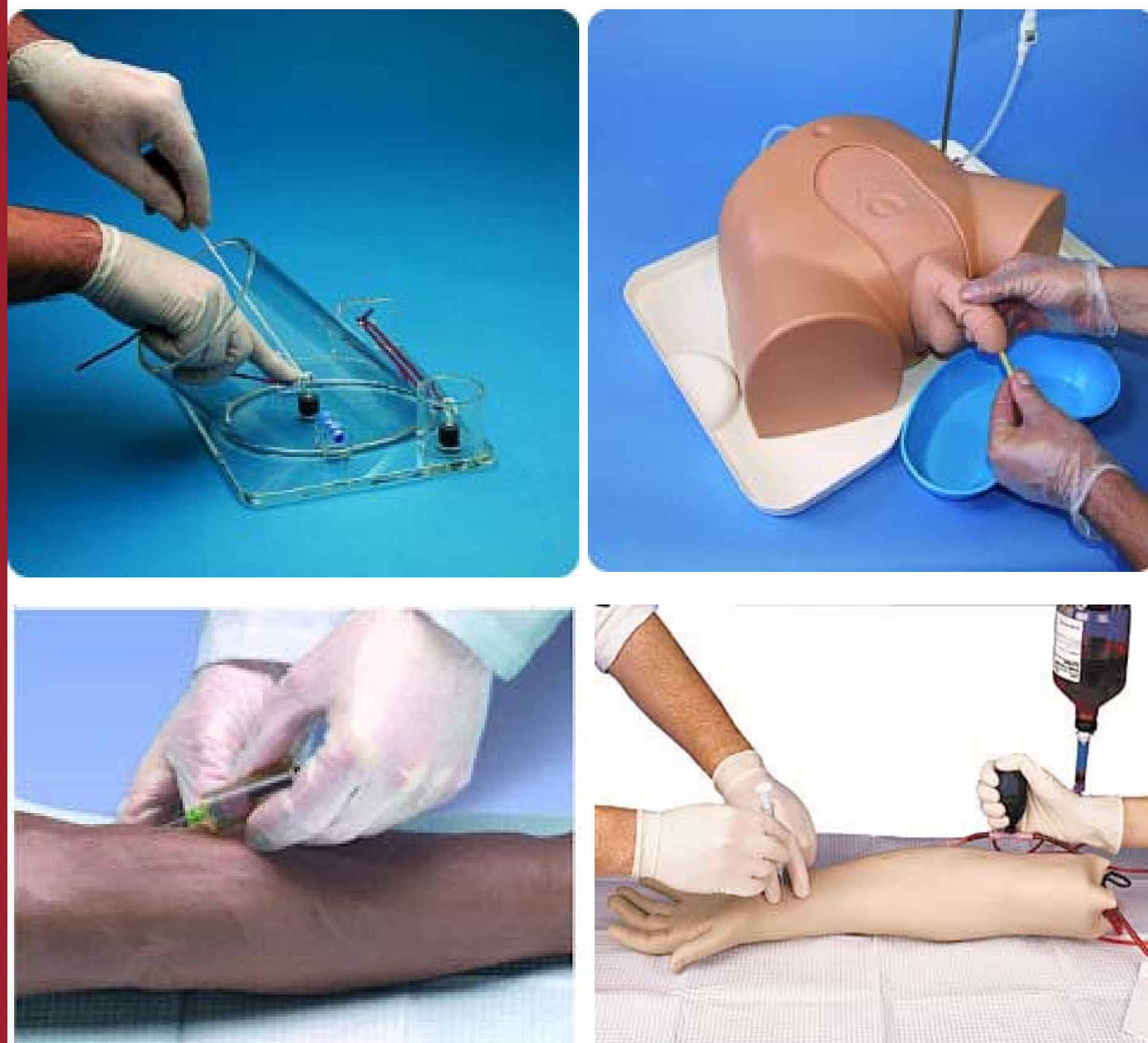
100% trainee believed that the didactics were interactive and that the skills training was useful. All trainees either “Agreed” or “Strongly Agreed” that: SCOP enhanced learning better than reading or lecture alone, the knowledge and skills gained will be clinically helpful and that they feel better prepared and less anxious for their clerkship. All but four trainees expressed a strong desire to have similar orientation before clerkship in all other specialties.

CONCLUSION

1. Simulation science can facilitate safe introduction of medical students to clinical practice and create a more valuable learning experience during clerkship thereby generating interest for the specialty.
2. Simulation based pre-clinical credentialing can ensure that patients safety and quality of care provided by the medical students doing surgical clerkship.
3. The skills essential during clerkship are common amongst various specialties and this study could serve as a generic template. The successful outcome of the pilot phase is encouraging us to continue it further.

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