Do Surgical Boot Camps or Previous Training Lead to Improved Fundamentals of Laparoscopic Surgery Skills?
Robert Naples, DO, Judith C French, PhD, and Jeremy M Lipman, MD, MHPE
Department of Surgery

Background

- Resident exposure to minimally invasive surgery has increased dramatically over the last decade.1,2
- Fundamentals of Laparoscopy Surgery (FLS) is required for all residents to become certified by the American Board of Surgery.3
- Medical student surgical boot camps often provide exposure to laparoscopy prior to beginning residency training.4
- International Medical Graduates (IMGs) often have prior surgical training outside of the United States (US).
- This study aims to evaluate the impact of surgical boot camps and prior clinical training on FLS skills.

Methods

- FLS skills of general surgery (GS) interns were assessed during their first week of US residency.
- US graduates were grouped according to prior FLS exposure, and IMGs were grouped by previous residency training.
  - Only non-designated preliminary surgery residents were included.
  - Continuous variables are reported as means ± standard error and compared using a paired t-test.
  - Cohen’s d was calculated, with ≥0.80 representing a large effect.

Results

- 87% (n=6) of US graduate categorical interns participated in a surgical boot camp.
- 38% (n=3) of IMGs were independently practicing surgeons in their respective country.

Figure 1: Flow Diagram of Participants

![Flow Diagram of Participants]

Prior exposure with surgical boot camp.

Conclusion

- Medical student exposure to FLS did not improve performance as a resident in 3 of 4 tasks.
-IMGs with previous residency training demonstrated improved performance of FLS tasks compared with all other residents.
- Prior clinical training has the most significant impact on improvement in FLS skills prior to surgical residency.
- Enhanced exposure to laparoscopy in the clinical setting for students may improve technical skills upon entering residency.

References