Interactive Learning as a Solution to Decreasing Surgical Exposure

description of the changing scenario of obstetrics and gynecology residency training by Gupta et al in the September 2015 issue of the *Journal of Graduate Medical Education* confirms what many of us are experiencing in our residency programs. As a junior faculty member of my training program, I witnessed residents suffer less exposure to procedures and high-risk emergent clinical scenarios. The problems we face with decreased exposure to surgical procedures is not unique to my field and permeates throughout all medical specialties. The prevailing question is: What can be done?

As Gupta et al¹ point out, many believe that the main limitation is the limit on resident duty hours.^{2,3} However, these changes are here to stay, not only for the benefit of the residents, but for patient safety as well. Therefore, the main challenge and objective for residency programs is maximizing the quality of learning during the hours available.

In the era of milestones, we must be able to evaluate the progression of knowledge, skills, and attitudes of our residents. In response to this new evaluation system, we must develop new teaching techniques. The system relied on for teaching in the clinical setting, the use of lectures to communicate knowledge, and an apprenticeship model for teaching surgical skills are obsolete.^{3,4} Residency programs need to implement learning curricula that promote acquisition of structured and progressive knowledge, paired with faculty and resident skill development and self-motivation. Implementation requires both faculty and residents to be engaged, together with a supportive environment where repetition and problem solving guides discussions in clinics and in the classroom. Faculty unprepared for this challenge may

need to participate in courses that offer knowledge in teaching techniques promoting interactive learning and case discussion. As faculty evolve, residents must be empowered to develop self-learning techniques, use their prior knowledge, and find value in discussions that offer the tools to consolidate, apply, and prepare for the active management of patients.

Furthermore, curricular changes will enhance exposure to surgical procedures. As Gupta et al propose, the number of procedures performed does not reflect competency in the skill. Even with a lower number of procedures, if residents utilize every encounter to review indications, diagnoses, alternatives, equipment, and any aspect that is involved in managing the patient, they will learn to consolidate knowledge, optimize the exposure, and develop confidence to move to an independent level. 2

Medical education confronted radical changes in the past century for the benefit of today's trainees and their patients. Let us be part of the changes that will improve future generations in training, and in the short term, improve the quality of care provided to the nation.

Yailis Medina, MD

Assistant Professor, Obstetrics and Gynecology, University of Puerto Rico, Medical Sciences Campus

References

- 1. Gupta N, Dragovic K, Trester R, Blankstein J. The changing scenario of obstetrics and gynecology residency training. *J Grad Med Educ*. 2015;7(3):401–406.
- 2. Hirschl RB. The making of a surgeon: 10,000 hours? *J Pediatric Surg.* 2015;50(5):699–706.
- 3. Shore EM, Lefebvre GG, Grantcharov TP. Gynecology resident laparoscopy training: present and future. *Am J Obstet Gynecol*. 2015;212(3):298–301.
- 4. Brezis M, Cohen R. Interactive learning in medicine: socrates in electronic clothes. *QJM*. 2004;97(1):47–51.