Deficits in retention of anatomy knowledge from the preclinical years to clinical application on the wards have been well documented in medical education literature. We developed and evaluated interactive clinically-oriented basic anatomy modules that were nested longitudinally in the curriculum to increase anatomical knowledge during the obstetrics and gynecology (OB/GYN) clinical clerkship.

**OBJECTIVE**

Medical students’ baseline anatomical knowledge before entering the OB/GYN clerkship is poor. Nesting anatomical science into the clinical curriculum through preparatory e-modules and hands-on anatomy lab sessions may improve clinically-significant anatomy knowledge of the pelvis.

**METHODS**

**PARTICIPANTS:**
143 consenting third-year medical students

**MCQ EXAMINATION (29 QUESTIONS):**
Topics: uterus, vasculature, fallopian tube, perineum, placenta

**CURRICULUM:**
Four interactive e-modules
Hands-on gross laboratory experience with three stations (Figure 1)

**RESULTS**

**STUDENT PERFORMANCE:**
- Mean final scores for all questions increased by 10.12% ($p < 0.001$) after nesting of interactive modules
- Questions nested within the modules (“Curriculum questions”), the mean final scores increased by 14.3% ($p<0.001$); contrastingly, final scores of questions with no respective e-modules (“Non-curriculum questions”), only increased by 5.97% ($p=0.31$) (Figure 2)

**INCREASE IN POST-TEST SCORES:**
Greatest gains for final scores:
- Uterus-related questions (30.34% increase, $p = 0.002$)
- Vasculature (15.84% increase, $p < 0.001$)
- Fallopian tube (25.96% increase, $p = 0.004$)

**NON-CURRICULUM QUESTIONS:**
The same level of improvement was not seen in final scores for non-curriculum questions. With the exception of the fallopian tube/placenta exhibited insignificant gains with 7.49% and 4.98% changes, respectively

**TOPICS:**
- Perineal muscle anatomy (OB laceration repair)
- Anterior abdominal wall anatomy (cesarean section)
- Vulvovaginal and uterine anatomy (IUD insertion)
- Hysterectomy (Pelvic organ and neurovasculature)
- Fallopian tube (Hysterectomy)
- Perineal wall anatomy (cesarean section)

**DATA ANALYSIS:**
Univariate ANOVAs with paired t-tests

**CONCLUSIONS**
This curriculum may serve as a model of vertical integration of basic science and clinical concepts. Components of this model may be adapted and incorporated into an anatomy course or during the clinical clerkship. Active coordination between clinical and anatomy faculty was a strength of this curriculum. This collaboration is necessary as many institutions move forward with vertical integration of the medical curriculum.

**FUTURE DIRECTIONS**
This study was funded in part by the George Washington University Office of the Vice Provost for Teaching and Learning as part of the Spring 2013 Grants for High-Impact Teaching and Learning Practices.

**ACKNOWLEDGMENTS**
The authors wish to thank the George Washington University Himmelfarb Library staff and the students who completed the curriculum. I would also like to thank Dr. Jurjus for her mentorship and guidance throughout this process, as well as our entire team.

**FUNDING/Support**
This study was funded in part by the George Washington University Office of the Vice Provost for Teaching and Learning as part of the Spring 2013 Grants for High-Impact Teaching and Learning Practices.

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