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### Evaluating the Effectiveness of Using Thiel Soft-Embalmed Donors to Teach the Female Pelvic Exam to Medical Students

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Patterson, Amy; LaRocque, Autumn; Holt, Abigail; Grubbs, Heather; Becker, Rob; Schreck, Arielle MD; and Abercrombie, Caroline MD, "Evaluating the Effectiveness of Using Thiel Soft-Embalmed Donors to Teach the Female Pelvic Exam to Medical Students" (2020). *Appalachian Student Research Forum*. 38. <https://dc.etsu.edu/asrf/2020/presentations/38>

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# Evaluating the effectiveness of using Thiel soft embalmed donors to teach the female pelvic exam to medical students.

Patterson AK, LaRocque AR, Holt AG, Grubbs HC, Schreck AM, Becker RM, Abercrombie CL

## Introduction

- At the Quillen College of Medicine, first year medical students are taught how to perform the female pelvic exam as part of the "Introduction to Physical Exam" course.
- Our previous research has found that students who participated in our optional training sessions feel more confident and report a higher level of perceived transferability to live patients when learning the pelvic exam on soft embalmed donors in comparison to low-fidelity mannequins.
- We hypothesized that incorporating soft embalmed donors into the curriculum of first year medical students will accomplish the following:
  - Make this teaching method available to all first year medical students
  - Improve short term retention of pelvic exam technique
  - Increase confidence of learners and transferability of skills to clinical practice.

## Methods

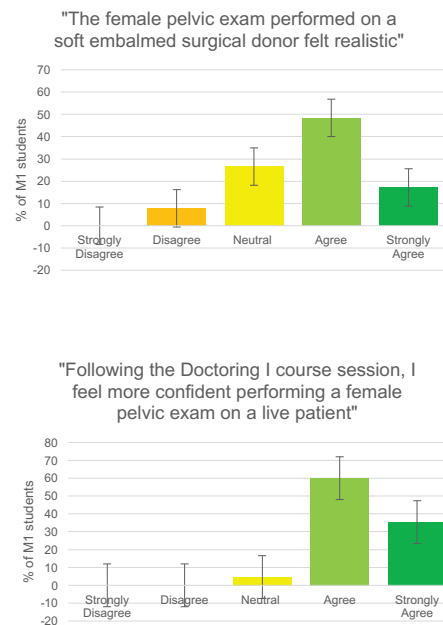
- High-fidelity soft embalmed donors were available for all first year medical students to practice the female pelvic exam with instruction from attending physicians.
- After learning exam techniques, all 67 students were given a survey to assess their confidence in performing the exam, perceived transferability to live patients, and preference for either soft embalmed donors or low-fidelity mannequins.
- They were invited back the following week to assess their short term retention and ability to accurately perform the pelvic exam, with the option of using communication skills learned elsewhere in the ETSU curriculum.
- Thirteen students returned for this follow-up session and completed surveys to reassess their experience.
- We plan to follow this cohort of students throughout their medical school career to assess long term retention.

## Students performing pelvic exam on soft embalmed donor vs low-fidelity mannequin.

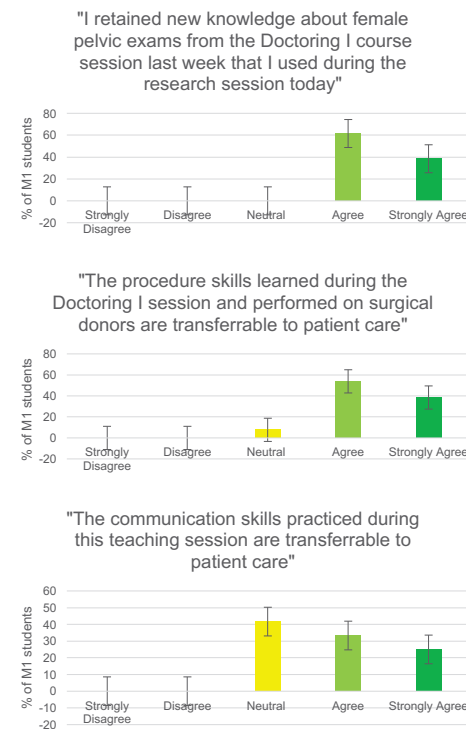


## Results

### Pre-Survey Results



### Post-Survey Results



## Conclusions

- Students agreed that high-fidelity soft embalmed models provided a more realistic approach to learning the female pelvic exam.
- After learning the female pelvic exam technique on high-fidelity soft embalmed models, students felt more confident in their exam skills and the ability to perform the exam in a clinical setting.
- Students agreed that this method of teaching helped them to retain their knowledge on pelvic exam technique.
- We look forward to following this cohort of students to see if this retention of knowledge persists into their third year of medical school when they begin performing this exam on live patients.

## Acknowledgements

- Department of Biomedical Sciences at Quillen College of Medicine for allowing us to conduct this research project.
- Gross Anatomy Lab staff for assisting us with preparing the lab for our teaching session.
- ETSU Department of Family Medicine for providing instruction and assistance during the pelvic exam teaching session.
- Individuals who donated their bodies for teaching purposes.

## References

- Chatman, A., Shelton, K., Becker, R., Campbell, A., Gozmao, L., & Abercrombie, C. (2018, April 27-30). *Comparison of Thiel-embalmed models and plastic models for learning female pelvic exam technique.* ACOG Annual Clinical and Scientific Meeting 2018, Austin, TX, United States.