

# Getting Their Feet Wet - Vaginal Delivery Simulation for Preclinical Medical Students

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### INTRODUCTION

Simulations play an important role in education that can be utilized in the preclinical years of medical school to strengthen the knowledge of medical students through experiential learning. They are also important to help ensure quality of care for patients. Participating in a vaginal delivery is one of the highlights of the medical student experience on the OB/GYN Clerkship.<sup>2</sup> These skills can be applied later during the third year OB/GYN clinical rotation.

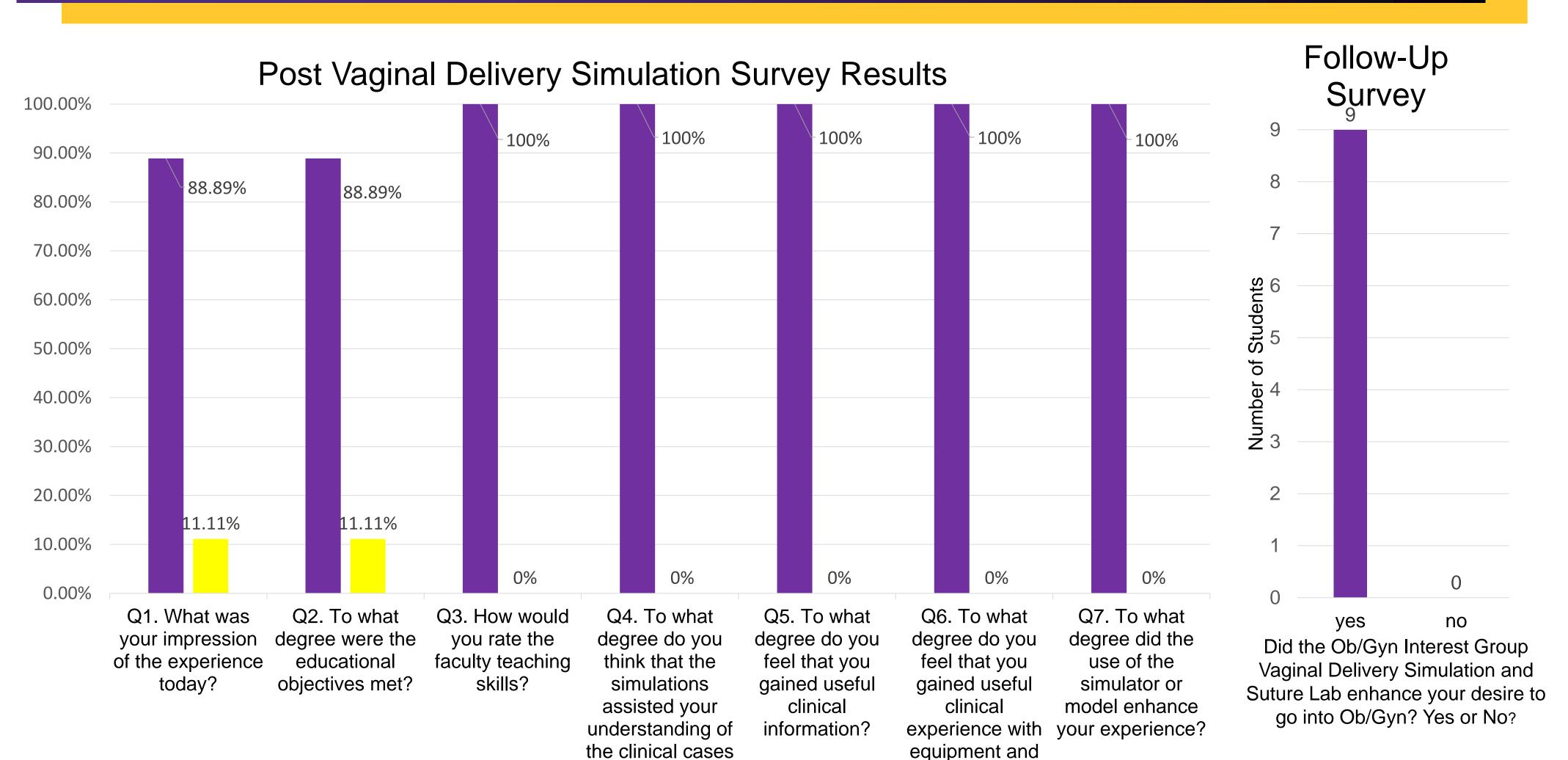
### METHODS

- The Brody Obstetrics and Gynecology Interest Group held a vaginal delivery simulation and suture lab that was open to all first and second year medical students. This was preceded by a cesarean section simulation the previous year that first- and second-year students attended.
- During the simulation and suture lab, nine secondyear medical students learned about the following:
- relevant vaginal delivery instruments
- how to deliver a simulated baby
- how to complete a running and running-locked suture
- patient safety measures that occur in the delivery
- At the conclusion of the simulation and suture lab, the participating students were presented with a post-simulation survey.
- Then, approximately 7 weeks later, the students completed a second follow-up survey.

### RESULTS

- Of the students that participated in the simulation and suture lab, all of them were second-year medical students. The post-simulation survey given to the participating students was graded on the five-point Lickert scale.
- Based on question number 8 in the postsimulation survey, 100% of the participants stated they would like to participate in future simulation education.
- Of the 9 students involved in the simulation, 9 participated in the second follow-up survey:
  - 55% (5 students) participated in the previous year's C-section simulation and suture lab.
  - 100% (9 students) answered yes in regards to the simulation and suture lab enhancing their desire to go into OB/GYN.

### RESULTS



equipment and

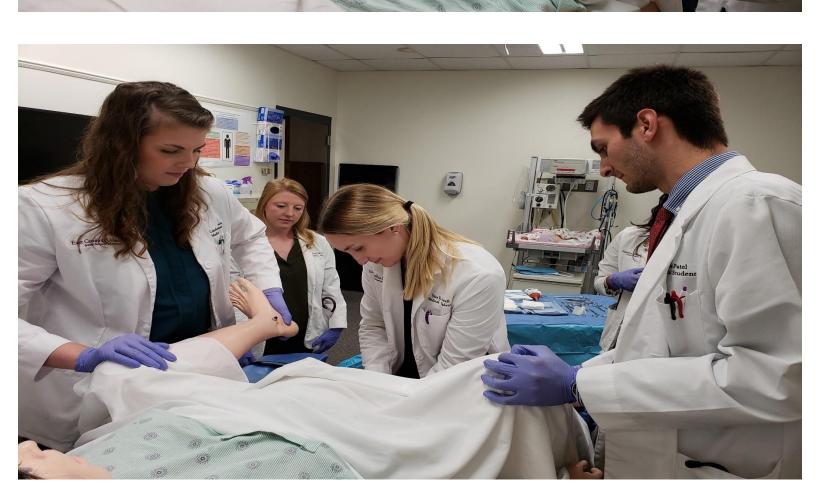
procedures?

# STUDENT PHOTOS & FEEDBACK





excellent very good





Student opinions' comparing the C-section simulation versus the vaginal delivery simulation:

- "Both experiences were remarkable. I preferred the most recent simulation because of the smaller group size, and everyone got to deliver the sim baby. These experiences definitely ease my nerves about the OB rotation during 3rd year since I have a basic idea of what to expect during the different types of deliveries."
- "I preferred the vaginal delivery simulation experience with the smaller group number and M2-only participants. Both were great to experience each procedure, but the smaller group size and organized instruction made this year's simulation more enjoyable for me."
- "With the vaginal simulation, all students got to rotate through the positions, but with the c-section simulation, it took so long that each student could only play one role (great model in 2017 though!)."
- "I believe the second experience (vaginal sim) was more valuable mainly because my medical knowledge was greater at the time of this experience. Additionally, the vaginal sim had a smaller number of participants which helped to facilitate greater individual learning."

## DISCUSSION

Simulation experiences provide learners with a low-stress, non-clinical environment to practice and gain comfort with these procedures while also identifying potential errors that can be prevented in the clinical environment. Therefore, experiential learning can be used as a teaching tool to enhance the confidence of students as they head into clinical rotations, which allows for practice, skill development and error analysis.1 Limitations include a lack of first-year medical students and a small sample size. While the small group size allowed for more hands-on activity, it limited the amount of feedback received. The current goal is to rotate the cesarean section simulation and vaginal delivery simulation every other year. This allows first- and second-year medical students to participate in both experiences before the OB/GYN clinical rotation in the third year.

# REFERENCES

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- 2. Nitsche, J., Morris, D., Shumard, K. and Akoma, U. (2016), Vaginal delivery simulation in the Obstetrics and Gynaecology clerkship. Clin Teach, 13: 343-347. doi:10.1111/tct.12458

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