

# Impact of Labor and Delivery Shadowing on Medical Student Interest in Obstetrics and Gynecology

Thy B. Nguyen, BA,<sup>1</sup> Sofie Rosenberg, BS,<sup>1</sup> Lauren Arguinchona, BS,<sup>1</sup> Nisha Batta, MS,<sup>1</sup> YooJin Yoon, BS,<sup>1</sup> Sarah Vangi, BS,<sup>1</sup> Lorena Ramirez-Renteria, BS,<sup>1</sup> Shawna Tonick, MD,<sup>2</sup> Katlynn Z. Adkins, MD<sup>3</sup>

<sup>1</sup>University of Colorado School of Medicine, Anschutz Medical Campus, Aurora, CO

<sup>2</sup>Department of Obstetrics and Gynecology, University of Colorado School of Medicine and UCHHealth University of Colorado Hospital, Aurora, CO

<sup>3</sup>Department of Obstetrics and Gynecology, University of Colorado School of Medicine and Denver Health Medical Center, Denver, CO

## Introduction

- The field of obstetrics and gynecology (OB/GYN) is facing a physician shortage.
- Half of U.S. counties currently lack a single OB/GYN and workforce projections predict a shortage of 22,000 OB/GYNs by 2050.<sup>1</sup>
- Increasing medical student interest in the field is an important method of combatting this growing shortage.
- The strongest predictor of post-clerkship interest in OB/GYN is pre-clerkship interest.<sup>2</sup>
- Preclinical shadowing programs in L&D departments are an effective means of exposure,<sup>3</sup> but limited data exists on their impact on perspectives towards the field.
- To explore this, we established a student-run L&D shadowing program to enhance pre-clerkship OB/GYN exposure and evaluate its effect on student attitudes and interest in the specialty.

## Methods

- Scheduling and program support for the shadowing experience was coordinated by student leadership of the American Medical Women's Association chapter at the University of Colorado School of Medicine (CUSOM).
- Preclinical students at the CUSOM attended one 6-hour evening shadowing shift in the Denver Health Hospital L&D Unit between November 2021 and January 2023.
- One student was assigned to shadow physicians of the L&D team per evening.
- Participants completed pre- and post-shadowing surveys to evaluate the impact of the experience on perceptions of OB/GYN and provide feedback.
- Only students who completed the pre- and post-surveys were included in the final analysis.
- Paired t-tests were used to compare students' responses between surveys.

Medical students who participated in a structured labor and delivery shadowing program at Denver Health *overwhelmingly found the experience to be valuable, demonstrating the feasibility and value of pre-clinical shadowing programs.*

## Results

Figure 1: Pre- versus post-shadowing attitudes towards OB/GYN

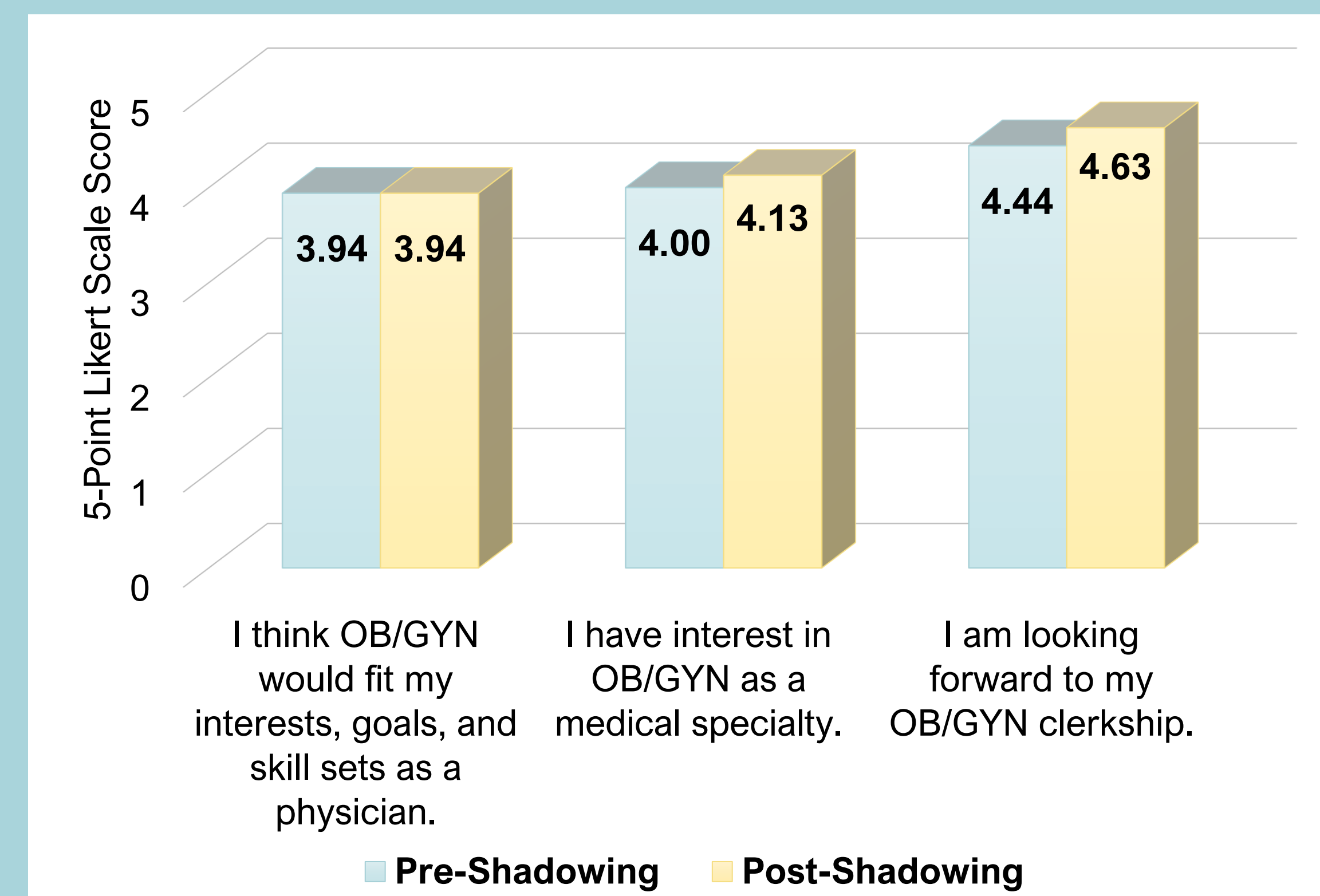


Figure 2: Shadowing experiences (n=16)

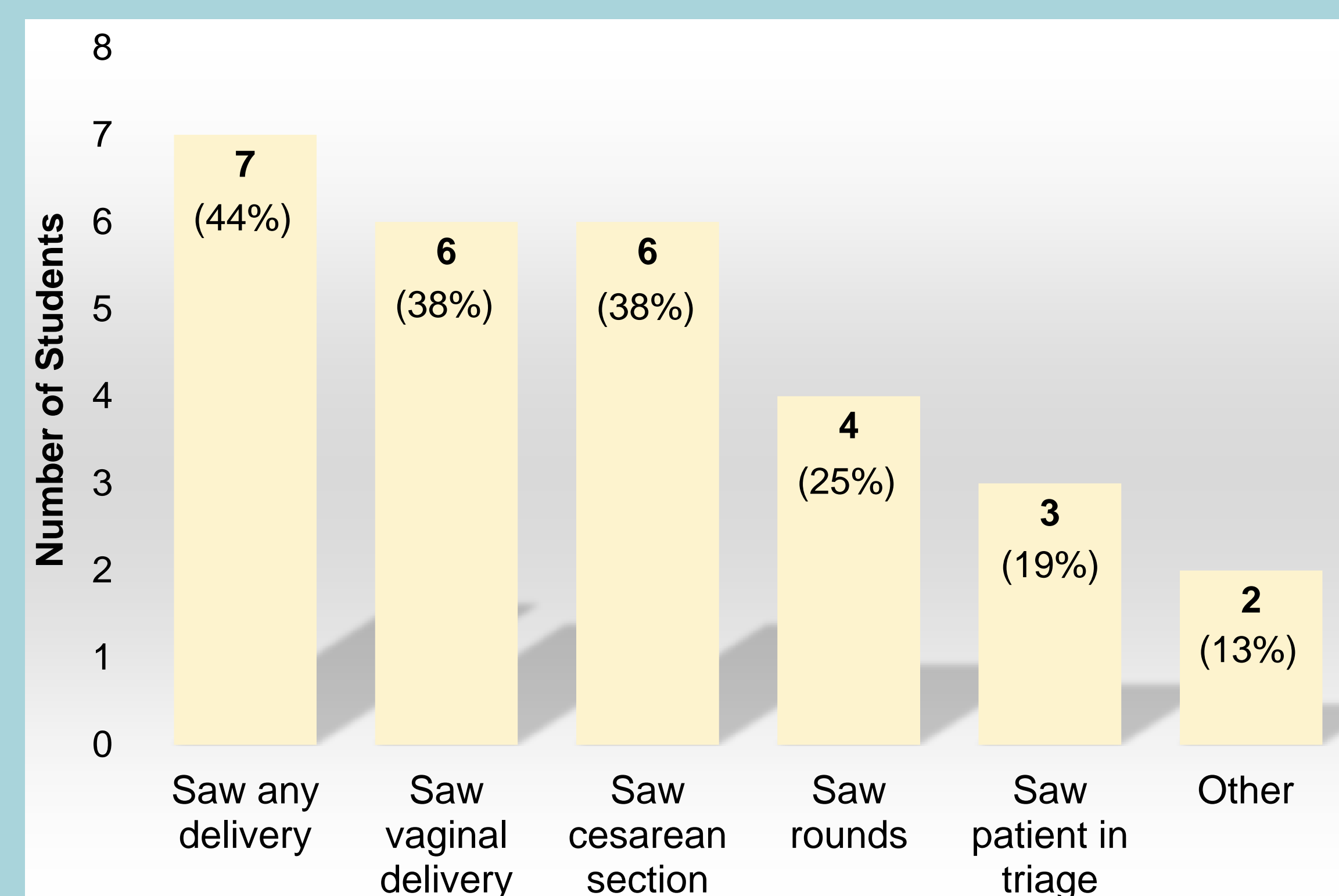


Table 1: Factors that altered respondents' opinions of OB/GYN post-shadowing

Factor	Number of respondents (%)	Representative Quotes
Exposure to the field	9/16 (56.25%)	"This is the first shadowing experience I have had as a medical student where I was welcomed to participate in the OR rather than told to watch from the corner and it was a really meaningful experience."
Interactions with the team	8/16 (50%)	"I LOVED my resident [...]. She was super friendly and helped teach me even when there wasn't much time to do so. I learned a lot from her and from the entire team and would love to shadow again in the future."
Culture	7/16 (43.75%)	"Very much enhanced my interest in the field and helped me contextualize what I was learning in class. Was also helpful in helping me decide that while I find the field very interesting and am more informed about the need in the field, I think my skill set would be better suited in a different field."

Table 2: Post-shadowing attitudes towards OB/GYN

Post-survey on attitudes towards OB/GYN after shadowing	Likert Score (Out of 5)
This experience enhanced my understanding of L&D	★★★★★ (4.50)
This experience was useful for my medical education and/or career	★★★★★ (4.56)
I would recommend this experience to other medical students	★★★★★ (4.69)
This experience altered my opinion of OB/GYN in a positive way	★★★★★ (3.94)

## Conclusions

- This program was designed to increase pre-clinical medical student exposure to OB/GYN and provide an early opportunity for career exploration.
- Through pre- and post- surveys aimed at assessing student attitudes towards OB/GYN, our analysis highlights the potential of such programs to not only promote interest and engagement in the specialty at an earlier timepoint than usual, but also emphasize the role of an interprofessional team in providing care.
- Limitations of our study include small sample size, limited scope, and limited gender inclusion.
- Future program development includes expansion to other clinical sites, creation of a longer-term preclinical elective, and expansion to include those with other gender identities.
- Looking forward, larger implementation would be helpful in evaluating the impact of such programs in promoting interest in OB/GYN and combatting the predicted shortage of women's health providers.



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