Department of Obstetrics and Gynecology

Implementing Team Birth Simulations to Increase Resident Confidence in Provision of Equitable Care

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INTRODUCTION

Team Birth is an initiative of Ariadne Labs, part of the Harvard T.H. Chan School of Public Health. It is a process implemented on labor and delivery units across the country to help improve patient autonomy, increase equity in birthing management, and promote patient centered communication, teamwork, and shared decision. Team Birth was implemented at OSUMC in 2021 to address the maternal health crisis facing Oklahoma and the nation. As training environment heavily impacts future practice habits, we sought a simulation curriculum which increases resident confidence in communication skills/values emphasized by Team Birth so that these skills be continue to be used throughout future practice.

OBJECTIVES

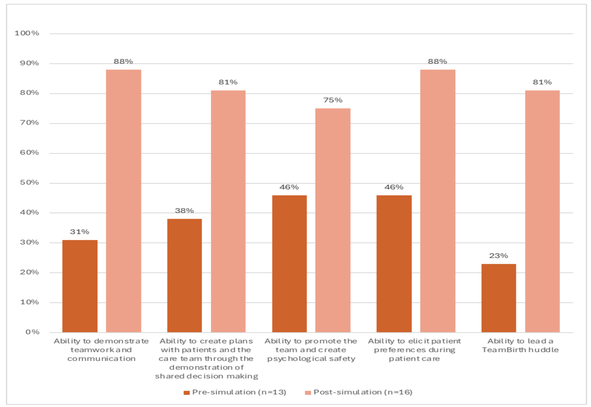
The objectives for this project were to determine if implementation of a communication based simulation curriculum based on Team Birth could increase resident confidence in provision of equitable birthing care, patient centered communication, shared decision making and team-building/leadership in an interprofessional setting.

METHODS

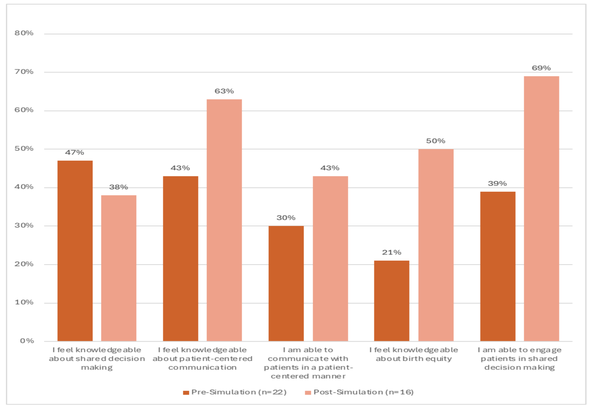
The inclusion criteria was restricted to current OB/GYN residents (PGY 1-4) at Oklahoma State University. Anonymous pre and post simulation surveys were distributed to OSU OB/GYN residents using Qualtrics. Surveys consisted of questions surrounding resident ability and confidence in patient-centered communication and delivery of equitable intrapartum care using a 5-point Likert scale. Residents participated in a didactic session prior to the simulation centered on the medical management of the situation around which the simulation was planned. Post simulation focus groups consisting of PGY 1-4 residents were facilitated by TeamBirth facilitators to elicit qualitative data regarding TeamBirth simulations. Quantitative data was analyzed using chi square and wilcoxon ranked sum tests. Qualitative data from the focus groups was evaluated by Ariadne Labs and the investigators.

RESULTS

Percentage of OSU Residents that were Extremely and Very Confident before and after Shoulder Dystocia Simulation



Percentage of OSU Residents who Agreed or Strongly Agree before and after Operative Delivery Simulation



Comparison of Pre vs. Post Responses using Chi-Squared and Wilcoxon Signed Rank Test

Sim	Survey Item	Chi2 (p-value)	Wil signed rank (p-value)	Interpretation
Shoulder dystocia	How confident do you currently feel in your ability to demonstrate teamwork and communication effectively?	P=0.301	P=0.27	
Category 2	How confident do you currently feel in your ability to demonstrate teamwork and communication effectively?	P=0.755	P=0.5	
Shoulder dystocia	How confident do you currently feel in your ability to create plans with patients and the care team through the demonstration of shared decision-making?	P=0.212	P=0.103	
Category 2	How confident do you currently feel in your ability to create plans with patients and the care team through the demonstration of shared decision-making?	P=0.687	P=0.5	
Shoulder Dystocia	How confident do you currently feel in your ability to promote the team and create psychological safety?	P=0.397	P=0.03*	The proportion of participants who felt confident in their ability to promote the team and create psychological safety increased significantly from a median of moderately confident to extremely confident between pre and post simulation. (z=2.17; p=0.03)
Category 2	How confident do you currently feel in your ability to promote the team and create psychological safety?	P=0.358	P=0.53	
Shoulder dystocia	How confident do you currently feel in your ability to elicit patient preferences during patient care?	P=0.541	P=0.259	
Category 2	How confident do you currently feel in your ability to elicit patient preferences during patient care?	P=0.755	P=0.50	
Shoulder dystocia	How confident do you currently feel in your ability to lead a TeamBirth huddle?	P=0.231	P=1.00	
Category 2	How confident do you currently feel in your ability to lead a TeamBirth huddle?	P=0.717	P=0.03*	The proportion of participants who felt confident in their ability to lead a TeamBirth huddle increased significantly from a median of moderately confident to very confident between pre and post simulation. (z=-2.38; p=0.03)

Selected Responses from Post Simulation Focus Groups

"Honestly, every time they come do these sims and we practice utilizing the boards at each point in the labor is really helpful because we obviously get really busy on labor and delivery. So anytime we get to practice [writing] stuff like that down I think is helpful." PGY-3

"The purpose of the communication based, especially with the patient. And I think just learning with team Birth about how to talk to your patients is just good. I think that is obviously a big portion of what makes you a good doctor is just learning how to talk to your patience, especially especially and stressful situations." PGY-4.

"I feel pretty confident that would be something I carry on, even, you know, especially because I'm graduating this year. So once I'm out on my own, I do feel like what I took away from team birth would still be within my practice. Hopefully, like the hospital that I go to actually have a board. I don't know how common that is across, like all the hospitals, but that would be very helpful, and I'd be excited to see that, and I would definitely like to take the time to utilize that board." PGY-4

"Especially as a first year kind of seeing in a simulated environment how shared decision-making is actually supposed to work because it's not something that, you always hear it mentioned in medical school, but it's definitely not something that's really taught until you get in and are starting residency. So actually getting to practice it and figure out what is an appropriate level of recommendation…I just think it's very helpful." PGY-1

"I feel like we are truly implementing these things and it's because we get to do them in a very safe simulated experience where it's like, no judgment, just do your best and then we'll talk about it. I feel like it's all of us are going to be really confident at a patient centered birth and patient centered care in general because of the sims." PGY-4 .

"Even in the outpatient setting, I really think like, and all fields and spaces of medicine could benefit from something like this, because it really is about, just providing equitable care, which is important in every part of medicine. And then, you know it's just emphasizing the importance of communication. And I know, like a lot of medical errors and things happen because of communication errors. So I think this could really apply to medicine in general." PGY-4

CONCLUSION

Implementing TeamBirth simulations specifically focused on improving patient-centered communication was effective to increase resident confidence in their ability to provide equitable, patient-centered birthing experiences.

Based on qualitative data obtained in focus groups, these simulations taught residents how to be better communicators and how to lead in an interprofessional setting. Younger residents more vocally appreciated the opportunity to build these skills, especially in a simulated environment.

These are skills that will translate into many areas of resident's future practice (inpatient/outpatient/emergent/non-emergent).

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