ABSTRACT

A preexisting high fidelity simulation center (the Peter M. Winter Institute for Simulation, Education and Research, called WISER) at our institution allowed development of a multidisciplinary Obstetric Crisis Team Training Course (OCTT). This course allows trainees to practice the performance of urgent GA for parturients. In this study, we surveyed anesthesiology residents who participated in the OCTT about their perceived competence and confidence with emergent GA in the obstetric patients, and with other obstetric crisis situations.

METHODS

On the day of the course, participants listen to a brief lecture focusing on team function. A facilitator then orients them to the simulation environment, including the labor room, operating room, medications, location of key equipment, etc. Participants then take part in 3-4 simulated obstetric emergencies. Their performance is taped. After each crisis, the team assembles in a debriefing room for video review and structured debriefing. Facilitators representing each of the 3 disciplines help guide the discussion. The focus of the debriefing is on improving team crisis skills and debriefing performance.

RESULTS

One of the core scenarios is a fetal bradycardia in a patient without a functioning epidural who ultimately requires an emergency cesarean section. This is an excellent scenario to allow anesthesiology trainees to learn and practice the team skills and the decision making skills required for optimal obstetric crisis patient outcomes. After the participants have debriefed the final scenario, they complete a post-course survey similar to the pre-course survey.

For this study, we administered a separate 10-item survey to anesthesiology resident participants 1 to 10 months after they had done the OCTT. The survey was adapted from that used by the Center for Advanced Pediatric and Perinatal Education (CAPE) obstetric emergencies course at Stanford University. The survey utilizes a 4 point Likert scale system with some additional specific answers. Results are presented as median with interquartile ranges and mode values.

INTRODUCTION

Obstetrical Crisis Simulation Course Maternal Condition “O” Urgent Cesarean Delivery with General Anesthesia


8 of 10 anesthesiology resident participants completed the survey (response rate 80%). The mean interval from OCTT to survey completion was 3.5 months (range 1-10). Survey results are presented below.

100% of respondents stated that they would recommend that other anesthesiology providers take the OCTT course.

Obstetric Crisis Team Training Course Anesthesia Post-Course Survey

Question on OCTT Survey
1-9 Graded Scale
1 = not at all; 2 = somewhat; 3 = moderate; 4 = significant

1. My communication skills have improved at work since OCTT
3 IQR 3-4

2. My level of awareness of teamates needs has improved
4 IQR 2.75 -4

3. I feel more confident about my ability to provide general anesthesia for an emergency c-section
3 IQR 3.25

4. I have a better understanding of communication issues involved in this.
4 IQR 2.75-4

5. My skill in administering a general anesthetic to a parturient for an emergency c-section has improved
3 IQR 3.4

6. The amount my confidence has increased during an obstetrical crisis
4 IQR 2.75-4

7. The time it takes me to identify a maternal/fetal crisis and execute a procedure has improved since OCTT
3.5 IQR 2.4

8. My ability to assume a clear role during an obstetrical crisis has improved
3 IQR 2.75-4

9. The amount I learned from participants during OCTT from other specialties than me
3.5 IQR 3.4

10. I have had additional opportunities to administer general anesthesia for an emergency c-section since OCTT
Yes 4 No 4

Teamwork Performance Debriefing Tool

CONCLUSIONS

A multidisciplinary team training course using full scale human simulation of obstetric emergencies can improve anesthesiology residents’ perceptions of their confidence and skill in performing emergency obstetric GA and dealing with other obstetric crisis situations.

REFERENCES

1. Anaesthesia 55 p63-183; 2000