Assessment of Knowledge Acquisition During a Novel, Intensive Obstetric Anesthesia Simulation Curriculum:

A Pilot Study in Vietnam

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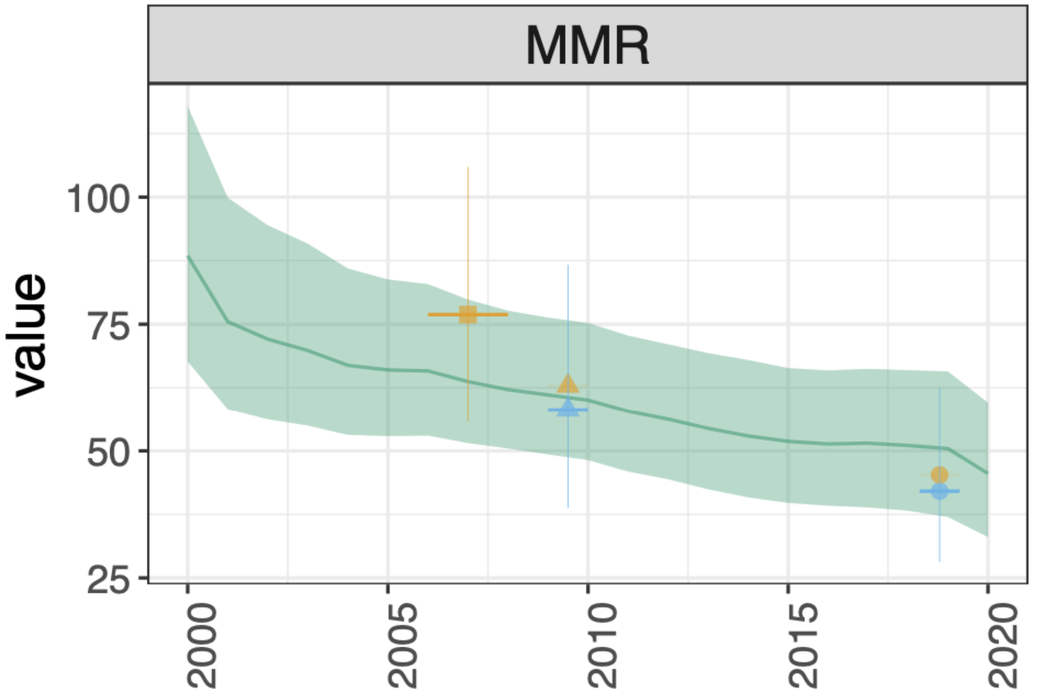
Background

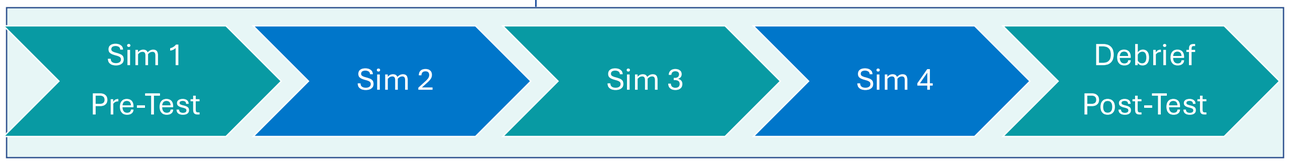
- Known disparities in the quantity and quality of the anesthesia workforce among and within countries
- Simulation based training has been shown to improve knowledge and skills acquisition
- Obstetric anesthesia simulation can be an important component to improving maternal care in LMICs

Study Aim

- Assess knowledge acquisition and retention following implementation of a novel obstetric anesthesia simulation curriculum at Huế University of Medicine and Pharmacy



Methods



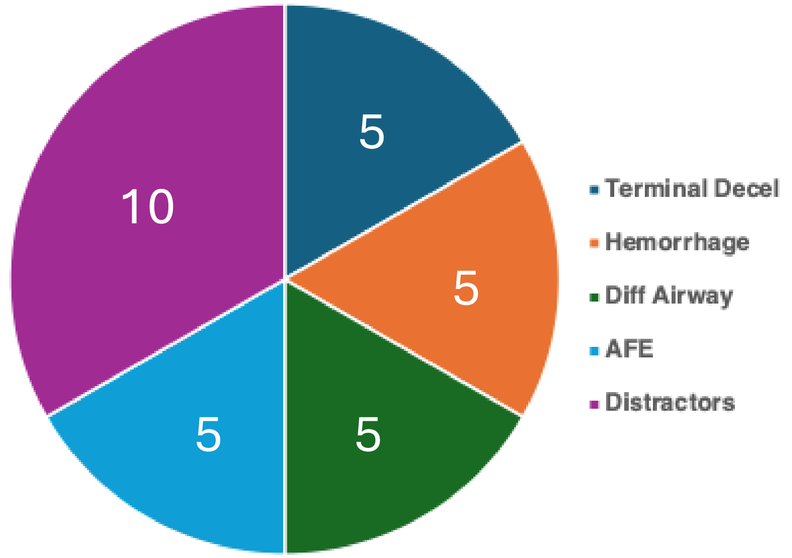
Sim	Topics
1	Terminal Fetal Bradycardia
2	Postpartum Hemorrhage
3	Failed Endotracheal Intubation
4	Amniotic Fluid Embolism

30 Question Test

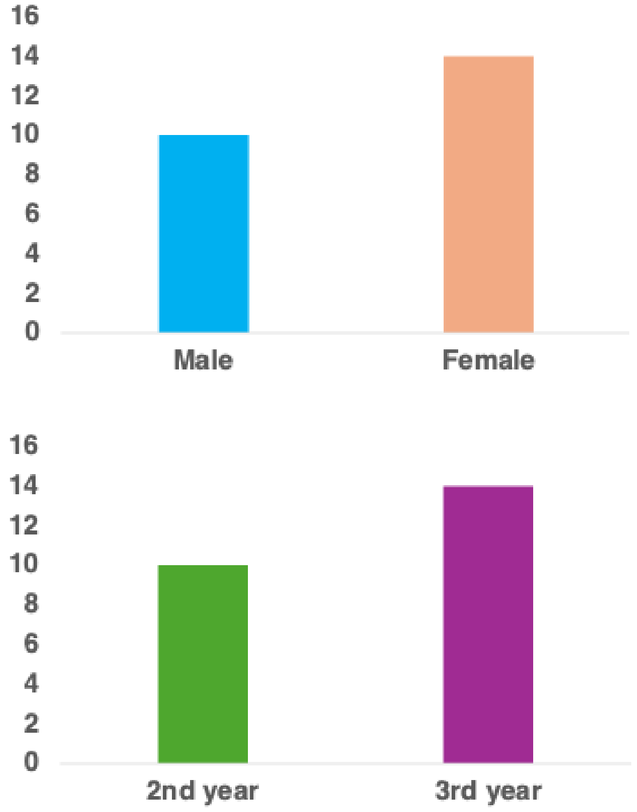
20 Simulation Based Topics
10 Distractor Questions

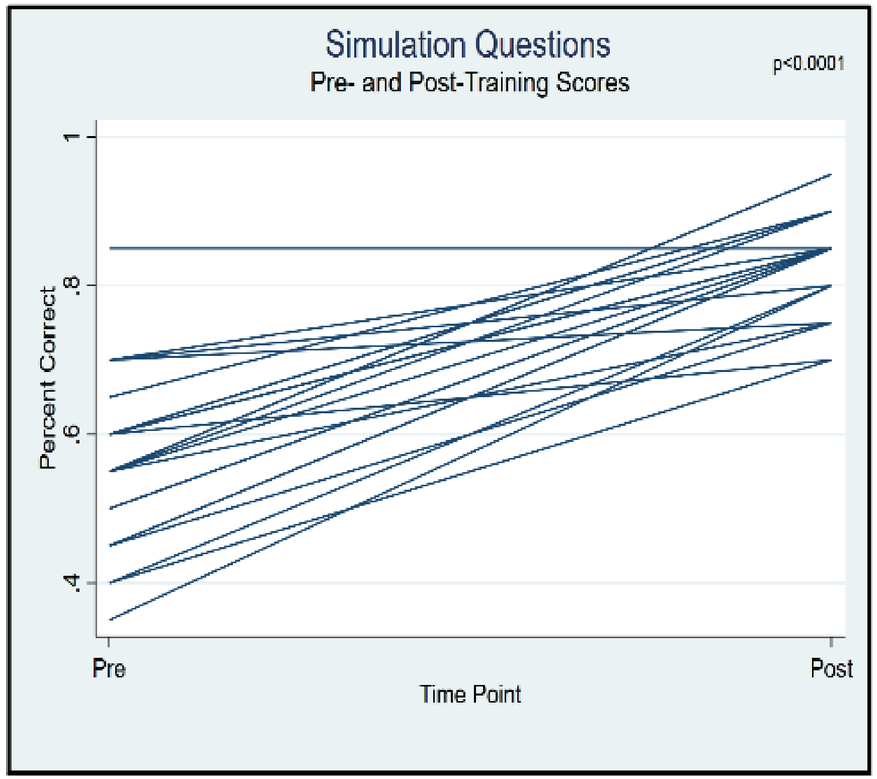
Pre-Test

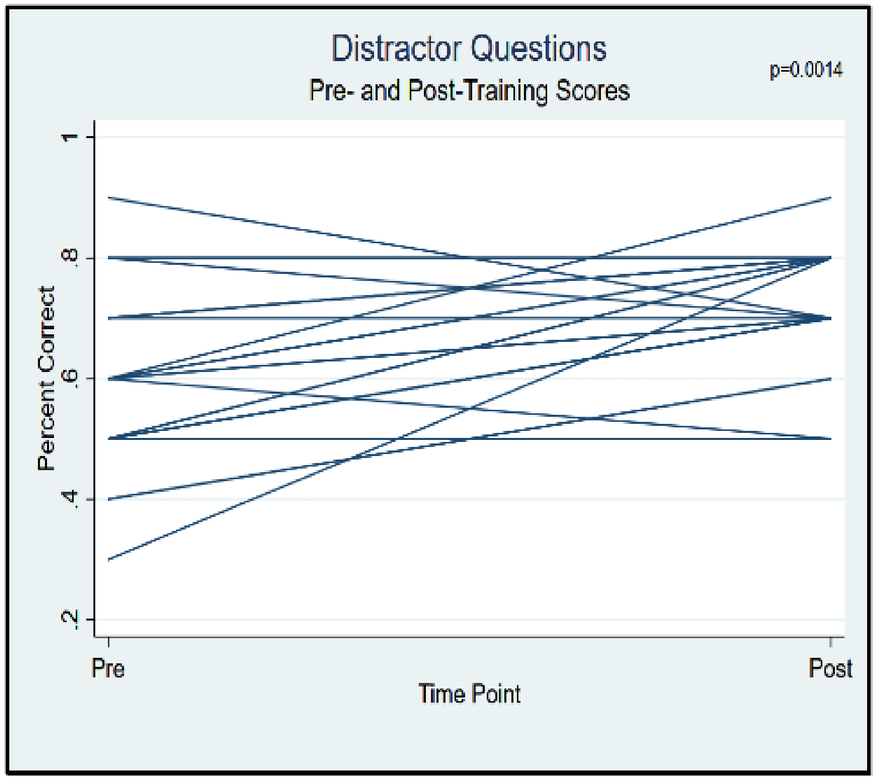
Distribution of Question Topics



Results







2-wk retention data:

- Short-term retention was <u>100%</u> (75-117%)
- Score improvement between pre-test (58%) and 2-wk (80%) was significant. Difference in simulation and distractor questions was also significant ($p < 0.0001$)
- No difference between immediate post-test and 2-wk post-test ($p > 0.05$)

Conclusions

Simulation associated with improved knowledge; no differences in gender, training year, or simulation role

Knowledge retention at 2-weeks remained robust

Studying long-term knowledge retention will elucidate optimal pacing and repetition of simulation curriculum

References

SOAP Society for Obstetric Anesthesia and Perinatology

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