Implementation of a novel, remote obstetric anesthesia lecture series for anesthesiology residents at Black Lion specialized teaching hospital in Addis Ababa, Ethiopia

Jordan A. Francke MD MPH, Brhane Tesfay MD, Betelehem Asnake MD, Aregawi Yoseph MD, Cristianna Vallera MD

INTRODUCTION

• Lack of access to high-quality, specialized surgical and anesthesia care for obstetric patients is a cause of significant morbidity and mortality throughout low- and middle-income countries (LMIC).[1-2]

• One study estimated that 21.1 million disability-adjusted life years are avertable by fully equipping LMIC with quality obstetric surgery and anesthesia resources.[1-2]

• In 2017, the country of Ethiopia had the fourth highest maternal mortality globally.[3]

• At St. Paul's Hospital in Addis Ababa, the country's largest labor and delivery services, the 2020 maternal mortality rate was 228.3 maternal deaths per 100,000 live births (LBs), a rate lower than many other Ethiopian institutions but still well above the United Nations' Sustainable Development Goal of less than 70 deaths/100,000LBs.[4-5]

https://www.utoledo.edu/med/globalhealth/addisababaEthiopia.html

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IMPACT AFRICA

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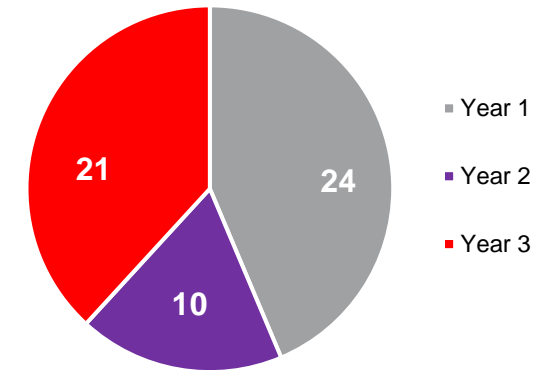UCLA Anesthesiology & Perioperative Medicine

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METHODS

• Black Lion Hospital (BLH), located the capital of Addis Ababa, is Ethiopia's largest referral hospital. BLH hosts an anesthesia residency program consisting of **87** total residents across three anesthesia training years.

• Over the span of four weeks, a senior UCLA anesthesia resident (mentored by anesthesiology faculty in both obstetric anesthesia and global anesthesia) delivered a total of **eight** hour-long lectures (2 per week) to these anesthesia residents over Zoom.

• Each lecture's remote audience consisted of between 38 and 50 residents from the three training years.

• A survey was circulated at the end of the lecture series, with a total of **55** respondents (**63.2%** of all residents).
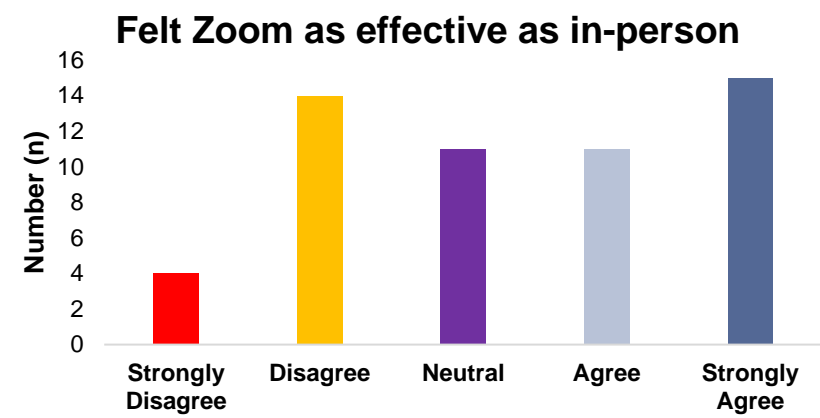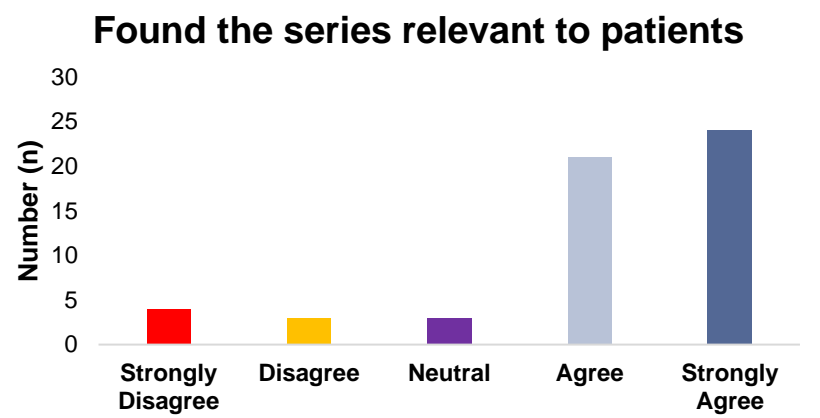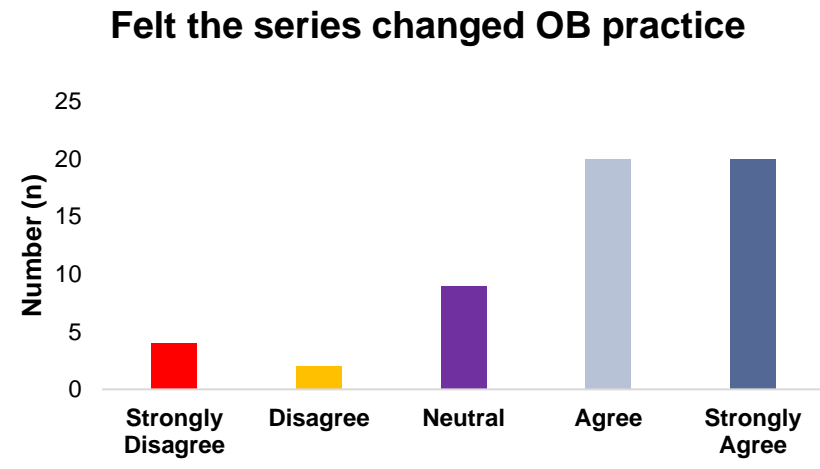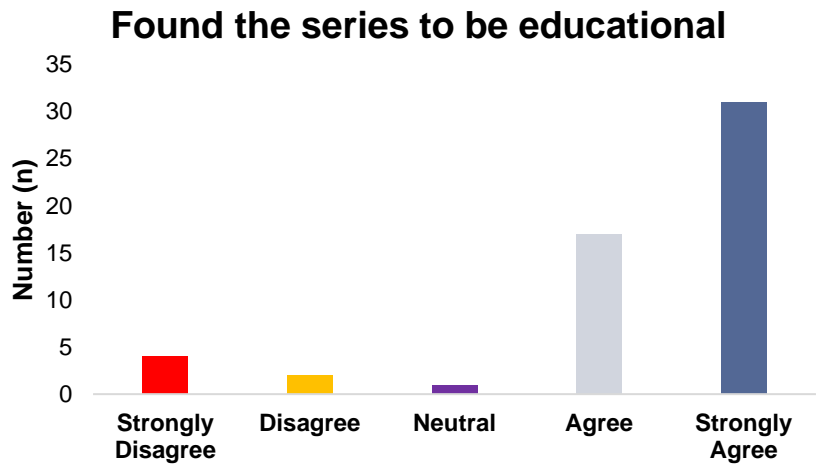
Residency Year of Survey Respondents

Year 1 — 24
Year 2 — 10
Year 3 — 21

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RESULTS

Found the series to be educational

Felt the series changed OB practice

Found the series relevant to patients

Felt Zoom as effective as in-person

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CONCLUSION/DISCUSSION

• Virtual technologies have already been employed to deliver obstetric anesthesia simulation trainings,[7] to deliver antenatal care[8], and formulate specialized obstetric anesthesia plans.[9]

˙ Our preliminary survey findings suggest that a virtual obstetric anesthesia lecture series for residents in LMICs can also be successfully done, especially when implemented with guidance from local physician educators who understand the pedagogical needs and priorities of the audience.

• Improving anesthesia providers' access to evidence-based specialized approaches to caring for obstetric patients will assist them in independently reaching their targets for reductions of maternal morbidity and mortality within their respective communities.