INTRODUCTION

• The profound shortage of anesthesiologists and lack of resources in low-income countries is associated with marked worldwide disparities in surgical disease burden, often leading to sub-standard care, increasing morbidity and mortality. For example, in Kenya for a population of 45 million people there are only approximately 138 anesthesiologists and only 5 pediatric trained anesthesiologists, despite the fact that 43% of the population is under the age of 15.

• To support our pediatric anesthesia providers in this setting, we created a global academic exchange among pediatric anesthesia colleagues from high and low resource countries with the goal of helping to improve the care of pediatric surgical patients around the world.

METHODS

• SPAN-A, the Safe Pediatric Anesthesia Network-Africa, was formed in 2014 by pediatric anesthesiologists from University of Nairobi, Vanderbilt Children’s Hospital, and Boston Children’s Hospital, to serve as a global academic exchange to share knowledge from different resource settings regarding the anesthetic care of pediatric patients.

• The inaugural project was the development of a monthly online live video case conference series. Using a program called Zoom ™, challenging cases and relevant topic overviews were presented by pediatric anesthesia trainees alternating between high and low resource institutions in an effort to balance the discussions between the two anesthesia resource communities. Following the presentation, an open discussion ensued among participants from the various institutions where differences and limitations in management techniques were discussed.

RESULTS

• Since September 2015, the collaboration has grown to include Red Cross Children’s Hospital, Great Ormond Street Hospital, and Emory University Hospital. The conference is now CME accredited while at times, excluding evidence-based practice norms. This can be amplified in areas of the world with very few specialists and limited opportunities for collegial exchange amongst peers.

DISCUSSION

• The provision of safe and quality anesthetic care requires active reflection and receptiveness to new ideas and possibilities. Typically, this is performed through quality initiatives consisting of literature reviews, journal clubs, conferences, and networking. However, in many areas of the world retrieval of new information is difficult, resources are limited, and access to novel techniques inaccessible. In fact, as with all anesthetic practices and training programs, there tends to be a “way things are done”, promoting regionalization of practice while providing solutions for safe pediatric anesthesia in these settings.

• This form of exchange provides a foundation for encouragement amongst the few pediatric anesthesia providers working in low resource settings while enhancing the educator pool for the new pediatric anesthesia fellowships in Africa.

CONCLUSION

• There is much to be learned from both the high and low resource setting in the field of pediatric anesthesia. The SPAN-A academic collaborative serves as a model to support our pediatric anesthesia colleagues in resource limited areas around the world. In addition to promoting high quality and safe anesthesia, we believe this model could be utilized for expanding opportunities of global pediatric anesthesia fellowship education. It also serves to promote collegiality and enhance our fellows’ professional communication skills, with hopes of igniting their future involvement in global health and sharing knowledge across our specialty to improve the care of pediatric patients.