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My Thoughts/My Surgical Practice

Conference cancelled: The equitable flip side of the academic surgery coin

The coronavirus disease 2019 (COVID-19) has converted the world to a "new normal" during which nothing is what it was before. By July 2020, over ten million people had been confirmed with COVID-19 and over 500,000 people have died.[1] Understandably, public health measures put a halt on public events at the start of the pandemic. Around the world, mass gatherings and academic conferences have been cancelled; others have found innovative means to shift virtually. Previous outbreaks have all resulted in some form of social reform for the better: the bubonic plague improved worker conditions, cholera outbreaks improved water sanitation, and HIV/AIDS led to improved community-based health education–now, COVID-19 could bring an unexpected silver lining: a paradigm shift in the way we exchange academic information and hold conferences into the virtual world.

In-person conferences come with important benefits. Many attendees will attest that in-person discussions and networking, especially for trainees and early career researchers and clinicians, make conferences so valuable. Additionally, they bring more opportunities for academic scholarship and career advancement by enabling a platform for presenting one's work and getting feedback from individuals at all stages of their career and from across the country, region, and world. Conferences are also opportunities to learn and practice new skills through workshops, ensuring both training for trainees and continuing medical education for experienced practitioners. Lastly, exhibition halls let participants interact with industry, employers, and more, pushing the forefront of surgical innovation. However, it may well be that the benefits of cancelled in-person meetings outweigh these lost opportunities.

Conferences have long come with substantial barriers that have made it difficult for those who would benefit most to attend. First, as the majority of academic conferences occur in high-income countries (HICs), accessibility has prevented many, especially from low- and middle-income countries (LMICs), to attend meetings in HICs for which visas are often hard to obtain.[2] Second, while some conferences have minimized trainee registration fees or customized charges depending on the country of origin, many meetings remain with considerable costs–often in high-end venues with little to no food or drinks.[3] These costs come on top of travel and accommodation costs, which altogether adversely affect individuals from lower socioeconomic status and from LMICs–sustaining and even widening disparities.[4] Linking opportunities for academic advancement to financial accessibility, especially when medical education in the United States is inherently cost-prohibitive, reinforces gaps in representation in the surgical workforce. Third, linguistic barriers impede the dissemination and shared learning among non-Anglophone healthcare professionals and scientists, especially when, for instance, financial constraints in LMICs may complicate the ability to host large meetings. Fourth, surgeons from LMICs or understaffed areas are often among the few surgical providers for a local catchment area: leaving for several days may have substantial consequences in the provision of emergency and essential services.

Although these barriers still persist, the pandemic provides the academic surgical community with the opportunity to increase access to the growing body of knowledge. Virtual platforms now allow for greater access to previously excluded trainees and attendings; allowing them to participate in the discourse, learning opportunities, and innovations within surgery. Be it taking part in top-tier surgical simulations, listening to keynote presentations from leaders in the field, or merely learning from colleagues in their surgical specialities, everyone is now more able to do so. Similarly, academics who are conducting research in underrepresented countries and underinvestigated patient populations, and who were previously unable to attend meetings in their pre-COVID-19 format, can now bring overlooked insights to a broader audience. For trainees in medicine and in research, virtual conferences—like in-person conferences—will enhance their research experiences. Further, virtual conferences may allow for improved collaboration between specialties, breaking down perceived silos and promoting multidisciplinary discussion and collaboration. The benefits are plenty, and should not be overlooked.

Several events have already shown the success of ensuring free or low-cost attendance to large meetings. In March 2020, the American College of Cardiology held a successful annual Scientific Session alongside the World Congress of Cardiology. In May 2020, the American Association for Thoracic Surgery shifted its centennial meeting to a virtual platform, drawing over 5000 current and future cardiac surgeons, cardiologists, and researchers from all over the world—more than in-person editions were ever able to draw. Professional societies have hosted numerous webinars, attracting up to thousands of attendees. Meanwhile, training programs have shifted to virtual rounds, webinar-based grand rounds, and online clerkships to safely support surgical education during COVID-19.[5] While the main intent has been to cope with the pandemic, these developments reach far beyond COVID-19, allowing for and catalyzing equitable access to surgical education worldwide.[6,7] These experiences become ever so important in a time where the already scarce workforce in LMICs is critically affected.[8]

As conferences move online, equitable practices ought to remain at the forefront of these activities:

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1. *Accessibility*: where possible, conferences should remain openly accessible. This translates to reducing attendance fees and providing support (e.g., translation services) to participants who need assistance. Uploading sessions online after the event is an example of current practice that enables open access and serves as institutional memory for organizing committees. Although conferences, even when virtual, are costly to host, sponsorship can be maintained through virtual exhibition halls and online promotion, thereby enabling registration fees to be held at a minimum.
2. *Networking:* conferences should provide and facilitate safe online platforms for smaller groups to discuss and share. Existing virtual conferences have enabled live chats alongside the meeting, reducing the threshold for individuals to speak up. This is especially important for our colleagues whose first language is not English, and may not feel as comfortable raising a question or comment in a hall filled with surgeons. Similarly, like-minded individuals can be more easily connected with each other based on pre-defined interests, improving the efficiency of networking, discussions, and exchange of ideas that is more difficult to attain through large in-person meetings. Audience participation can further be fostered as platforms develop. This may include the creation of dedicated breakout rooms, creating topical discussion threads, embedding social media feeds within conference platforms, developing live polls before or during presentations, and disseminating feedback surveys or introducing transparent rating mechanisms immediately after presentations.
3. *Interaction*: conferences can empower their attendees to participate in asking and answering questions, assess their learnings, and provide means to practice skills. Although many conferences are currently shortened versions of in-person conferences, they may reinforce poster and podium presentation opportunities by, for example, extending the duration meetings, creating parallel breakout rooms, or uploading pre-recorded presentations for various formats (e.g., videos for podium presentations, audio recordings attached to posters). Further, virtual workshops may provide unique opportunities to attendees, as the evolution of simulation technology will lead to more interactive learning activities at gradually lower costs. The current necessity to move online may further lead to a push for low-cost simulators that can be used alongside virtual conferences.

These practices should not be reserved for the current pandemic. They should be a welcome transition to equitable opportunities that can accompany conferences when they can safely take place again. COVID-19 should be an opportunity to rethink the way we work. Lessons ought to be drawn and maintained post-COVID-19, to strengthen health services and public health practice in times of uncertainty.[9] Providing equal opportunities for education will benefit millions around the world during a time in which gaps in access to surgical care persist, and even grow.[8] As healthcare professionals and educators, we have a role to promote equity at all levels–especially to advance the future of our field.

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