Perspectives on a virtual student-led research conference in ophthalmology Perspectives d'une conférence virtuelle de recherche en ophtalmologie dirigée par des étudiants

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Implication Statement

We share our experience of organizing a one-day virtual educational event, the first Canadian national student ophthalmology conference, in response to the need for ophthalmology career exploration. The conference included mentorship with residents, research presentations, keynote speakers, and more. Following the event, students expressed some improvement in accessing ophthalmology mentorship and research opportunities, along with a modest enhancement in their understanding of the specialty. We provide insights into the organizational framework and quality improvement results, aiming to assist students in adapting similar events for various specialities.

Introduction

The switch to virtual educational events during the COVID-19 pandemic has led reduced opportunities for clinical and educational opportunities.¹ However, it also led to the emergence of student-led initiative such as the Canadian Ophthalmology Mentorship Program (COMP),² and Post-Match webinars,³ which aimed to bridge gaps in access by offering virtual mentorship sessions and insights into the match process, respectively. The increased uptake of virtual, student-led pedagogy not only encourages medical students to expand their roles beyond mere learners, but also provides an opportunity to encourage wide

Énoncé des implications de la recherche

Nous partageons notre expérience portant sur l'organisation d'un événement éducatif virtuel d'une journée : la première conférence nationale canadienne des étudiants en ophtalmologie. Cette initiative a été prise en réponse au besoin d'exploration des carrières en ophtalmologie. La conférence comprenait des séances de mentorat avec des résidents, des présentations de recherche, des conférenciers d'honneur, entre autres. Suite à cet événement, les étudiants ont exprimé une amélioration dans l'accès au mentorat et aux opportunités de recherche en ophtalmologie, ainsi qu'une modeste amélioration de leur compréhension de la spécialité. Nous offrons un aperçu du cadre organisationnel et des résultats de l'amélioration de la qualité, dans le but d'aider d'autres étudiants à organiser des événements similaires pour diverses spécialités.

participation by making conferences accessible to individuals with low-socioeconomic status, caregivers, and delegates with disabilities, thereby working towards reducing inequalities that persist in academia.⁴ An important consideration, given the growing emphasis on medical students' involvement in scholarly activities in ophthalmology and other surgical specialities.⁵

In response to these needs, the Canadian Ophthalmology Student Interest Group (COSIG) developed the first Canadian medical student-led ophthalmology conference, "COSIG Annual Meeting" (CAM), a one-day event with the theme of global health, with the goal of providing medical students with opportunities to create a sense of community, enhance knowledge about ophthalmology as a speciality, showcase medical student research in a supportive environment, network with peers and ophthalmology residents, and win prizes for trivia and research excellence.

Description of the innovation

CAM took place on March 29, 2021 via the platform Zoom, and it was free and open to all medical students globally, thereby reducing barriers to participation such as cost, the need for professional memberships, geographic location, and competing personal commitments. It was organized by a team of five committees (logistics, marketing, mentorship, research, and sponsorships) consisting of medical student volunteers from 12 programs across Canada. CAM was largely marketed via the Canadian Ophthalmology Student Interest Group social media. In addition to keynote speakers, trivia with prizes, and research presentations, we implemented a novel one-hour Speed Mentorship Session in partnership with the COMP. During these sessions, nine ophthalmology residents acted as near-peer mentors in small group sessions, thereby addressing gaps in mentorship for medical students interested in ophthalmology while upholding psychological safety.⁶ To identify areas of improvement of the program, students completed preand post-conference questionnaires sent via the registration e-mails (one at registration, and one post-event) consisting of questions regarding the quality and impact of the event (64/123; 52% responded post-conference).

The survey data was collected under quality assurance and quality improvement and so do not require Research Ethics Board.

Outcomes

Survey results indicated that CAM organization and content was well-received by medical students (Figure 1A,B), and that many reported increased access to ophthalmology mentorship and interest in applying to the speciality. All medical schools were represented with the majority from McGill University (14%), University of British Columbia (14%), and Western University (12%) (123 participants). Most participants were in clerkship (57%). Tools used (i.e., Figure 1A) were free, and the prizes for trivia and research presentations were obtained by emailing companies.

Suggestions for next steps

CAM exemplified the potential of student-led virtual communities to provide more accessible, cost-effective, and inclusive reach than traditional conferences. Such flexible opportunities could help bridge the educational gap in the ever more crowded medical school curriculum. Future steps include collaborating directly with the Canadian Ophthalmological Society (COS), as this may not only increase conference awareness within the present ophthalmology community but also allow for the development of workshops and longitudinal mentorship opportunities.

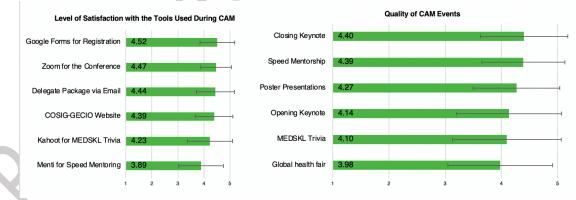


Figure 1. Student ratings of satisfaction with the tools used during the conference B) and the quality of the events. There were 64 respondents. Rating scale was: 1 = very unsatisfied to 5 = very satisfied.

Conflicts of Interest: The authors have no competing interests to declare that are relevant to the content of this article.

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References

- Succar T, Beaver HA, Lee AG. Impact of COVID-19 pandemic on ophthalmology medical student teaching: educational innovations, challenges, and future directions. *Surv Ophthalmol*. 2022;67(1):217-225. <u>https://doi.org/10.1016/j.survophthal.2021.03.011</u>
- Tanya SM, Nguyen AX, Pur DR, et al. Bridging gaps in access to ophthalmology mentorship with the virtual Canadian Ophthalmology Mentorship Program. *Eye*. Published online 2022. <u>https://doi.org/10.1038/s41433-021-01899-y</u>
- Nguyen AX-L, Pur DR, Lo C, Gottlieb C, Hardy I. Experiences from a national webinar with recently matched Canadian ophthalmology residents for medical students. *Can J Ophthalmol*. Published online Aug 2021. <u>https://doi.org/10.1016/j.jcjo.2021.10.004</u>
- Raby CL, Madden JR. Moving academic conferences online: Aids and barriers to delegate participation. *Ecol Evol*. 2021;11(8). <u>https://doi.org/10.1002/ece3.7376</u>
- Pur DR, Iordanous Y, Bursztyn LLCD. Research productivity of first-year Canadian ophthalmology residents: a 12-year trend. *Can J Ophthalmol*. Published online 2023. <u>https://doi.org/10.1016/j.jcjo.2023.06.001</u>
- Nassrallah G, Arora S, Kulkarni S, Hutnik CML. Perspective on a formal mentorship program in ophthalmology residency. *Can J Ophthalmol.* 2017;52(4):321-322.

https://doi.org/10.1016/j.jcjo.2017.03.005