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Letters to the Editor

Re: A chance for reform: the environmental impact of travel for general surgery residency interviews

Ré: Une occasion d'introduire une réforme : l'impact environnemental des déplacements faits pour se rendre à une entrevue de stage en chirurgie générale

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The article "A chance for reform: the environmental impact of travel for general surgery residency interviews" by Fung et al. (2022) highlights the need for critical reflection by medical institutions on whether in-person interviews are sustainable.[1] With public health measures placed in response to the Coronavirus disease 2019 (COVID-19) pandemic, the Association of Faculties of Medicine of Canada (AFMC) declared that all residency programs would conduct interviews in a virtual format for the 2021, 2022, and 2023 Canadian Resident Matching Service (CaRMS) cycles.[2] While the medical learner experience adapts to the pandemic, a return from virtual to in-person curriculums has begun across Canada. With this in mind, in-person interviews may follow with lifting restrictions and the coordinated vaccination effort. As such, the paper acknowledges that alternative structures must be considered.[1]

Thousands of medical students from the 17 Canadian medical schools participate in the annual CaRMS tour.[3] Studies examining CaRMS and the US National Residency Matching Program (NRMP) recognize the considerable travel that occurs during the tour as a significant source of environmental burden.[4] The paper produces approximately 102 tonnes of carbon dioxide equivalents (tCO2e) by Canadian general surgery applicants during the 2019-2020 cycle alone.[1] As headlined by talks at the United Nations COP 26 Climate Summit, there is a need to accelerate action and cut annual greenhouse gas emissions to ensure global targets are met.[5] With an estimated 4239 tCO2e produced during the 2020 CaRMs tour alone, annual tours contribute significantly to otherwise mitigable emissions.[6]

In contrast, virtual interviews almost entirely eliminate the carbon footprint. With annual reductions of up to 99.9%, in-person tours cannot be justified without further study.[6] Ultimately, addressing the dilemma about interview delivery relies on the input of learners. A study performed by Domingo et al. (2022) sought to assess applicants' perspectives of virtual interviews in the Pacific Northwest.[7] A majority (83-96%) of respondents found virtual interviews to be more effective across several domains, including comfort and connection, and 84% expressed desires to keep components of virtual interviews in the future.[7] While these findings do not claim to be representative of all medical learners, they highlight the need to explore learner experiences and attitudes before returning to pre-COVID-19 era practices.

It is important to acknowledge that in-person interviews provide valuable insights. From demonstrating interpersonal skills to exploration of program culture, social environment, and lifestyle, these are core experiences associated with the CaRMS tour. However, we must consider that solely continuing in-person interviews is not environmentally feasible and may exacerbate the

same inequities we attempt to mitigate. Challenges of in-person interviews include significant time commitments to primary caregivers, those with dependents, and burnout among applicants. Immense financial costs disproportionately impact first-generation and low-income applicants. Every dollar spent on applications, transportation, and hotels becomes another exclusionary barrier, yet does not correlate to academic excellence or performance. Virtual tours may be an approach that can simultaneously mitigate thousands of tonnes of emissions annually and decrease systemic barriers perpetuated by in-person tours.

Without rapid reductions in emissions and formal commitments by nation-states and major corporations, the global climate crisis is projected to result in devastating consequences. It threatens to widen existing inequities within Canada and around the world by disproportionately impacting marginalized communities and low- to middle-income countries.[5] Healthcare professionals have a moral obligation to take action. The authors importantly recognize that our conversations about climate action must include reflections on the contributions of our existing health systems and medical education norms to the climate crisis.

In acknowledging the devastating losses and challenges of the pandemic, we also recognize the valuable momentum generated. It is an opportunity to implement innovative approaches, including hybrid structures, that address inequities posed by in-person interviews, and are thoughtful about the consequences of our next steps. In Canada, where the minimum infrastructure (i.e.; access to the internet and devices with cameras) needed to implement a virtual tour exists, it is a viable approach that can address the sustainable development goals committed to by Canada. However, we recognize this is not an option for every context around the world, including Canadian communities where the same infrastructure is not available. This limitation highlights room for growth in implementing virtual technologies and the need for leadership to prioritize equitable access to modern networks and learning technologies.

In the face of growing challenges posed by climate change, there is no longer room for a mandatory in-person-only approach. Decarbonizing the CaRMS tour is a step in shifting our dialogue away from carbon-intensive practices and embodies the sustainable values of Canadian healthcare professionals. This time is a critical window of opportunity for Canadian medical institutions and learners alike to explore decarbonization strategies, improve the interview process for applicants and programs, and prioritize our collective futures.

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