Title: Active Conferences – New Tool to Enhance Health Care Providers’ Cardiovascular Health

Short Title: Active Conferences

Amélie Paquin, MD MSc, Isabelle Nault, MD.

a Institut universitaire de cardiologie et de pneumologie de Québec / Quebec Heart and Lung Institute, Laval University, Quebec, Quebec, Canada.

Address of correspondence: Isabelle Nault, Institut universitaire de cardiologie et de pneumologie de Québec, 2725 Chemin Sainte-Foy, Québec, Québec, Canada, G1V 4G5.

E-mail: isabelle.nault@criucpq.ulaval.ca

Phone: 418-656-8711

Fax: 418-656-4581

Total word count: 398
Active Conferences – New Tool to Enhance Health Care Providers’ Cardiovascular Health

To the Editor:

The Covid-19 pandemic has led to multiple changes in our daily medical practice, including the widespread adoption and development of virtual patient encounters, as well as virtual professional meetings, conferences and congresses. On the upside, for some people, the amount of time saved with transportation led to increased time available for physical activity and leisure. Nonetheless, the sum of hours spent in front of a computer, being inactive and sedentary, has increased dramatically for most healthcare professionals in this current era of pandemic.

Sedentary time is defined as the time spent awake and at an energy expenditure level ≤1.5 metabolic equivalent of task (METs) while in a sitting, reclining or lying posture. It could be expressed in other words as the total “sitting time”. (1) While this concept does not preclude the regular practice of physical activity at other moments, sedentary behaviour has been demonstrated to be strongly associated with an increased risk of all-cause mortality, incident cardiovascular disease, development of type-2 diabetes and cancer. (2) Several potential contributive mechanisms have been identified such as the development of vascular dysfunction, increased inflammation, increased vasoconstriction and blood pressure, elevation of blood glucose levels, and altered cerebrovascular function. (3) Moreover, active interruption of prolonged sitting periods showed beneficial molecular and clinical effects, while lower total sedentary time was associated with reduction in all-cause mortality independently of the physical activity intensity level. (3,4)

Knowing how virtual conferences can significantly increase our sitting time, we instigated the inclusion of active sessions into our annual Quebec Cardiologists Association’s Scientific Meeting which occurred in May 2021. We produced two short 5-minute videos of stretching, core-strength and aerobic exercises, led by a kinesiologist, and which could be performed during breaktime and/or during conferences (Figure 1). Of 150 survey responders (mandatory survey for accreditation), 70% mentioned having participated fully or in part to the proposed exercises. Thirty percent felt it improved their concentration ability, 65% were encouraged to increase their global physical activity level, and 77% intended to be more active or to participate into similar active sessions during future conferences.

It was a great success for a great cause, and we are thrilled to be including more of these active sessions in upcoming virtual conferences, because our hearts as cardiologists and healthcare professionals matter as much as the hearts we treat.
**Acknowledgements:** We thank Sébastien Cartier and Valérie Busque for their generous participation into the creation of the exercise videos.

**Funding sources:** AP is recipient of a scholarship from the Canadian Institutes of Health Research (Canada) and of the Fonds de recherche du Québec – Santé (Québec, Canada).

**Disclosures:** None.
References:


Figure Legends

- Figure 1: Short sequence of exercises which could be performed in-between or during the conferences.