Canadian Medical Education Journal

Commentary and Opinions

Virtual education revolution during the COVID-19 pandemic: the introduction of national educational rounds in sport and exercise medicine

Une révolution de l'éducation virtuelle pendant la pandémie de la COVID-19 : l'introduction des séminaires nationaux en médecine du sport et de l'exercice

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Published ahead of issue: October 23, 2020; published April 30, 2021. CMEJ 2021, 12(2) Available at http://www.cmej.ca

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The impact of the COVID-19 pandemic on the practice of medicine has been well documented, including the drastic consequences on resident training. Soon after the World Health Organization declared the pandemic on March 11, 2020, all residency programs experienced major disruptions.[1] The cancellation of elective medical visits and procedures markedly reduced patient volumes and resident clinical experiences. Additionally, restrictions of in-person gatherings prevented traditional forms of in-person education.[2]

While all programs had to respond innovatively to these disruptions, programs of shorter duration were especially pressed. The enhanced skills programs offered by the College of Family Physicians of Canada (CFPC) were particularly affected. The CFPC offers five nationally-accredited subspecialty programs: sport and exercise medicine (SEM), emergency medicine, care of the elderly, palliative care, and family practice anaesthesia.[3] As all of these programs are of one-year duration, a disruption of nearly four months posed an unprecedented barrier to achieving sufficient experience and clinical competence.

In response to this threat, each of these programs swiftly responded with remodelling of their curricula. Universally, programs transitioned in-person academic half days, seminars, and journal clubs to virtual platforms, including Zoom, Microsoft Teams, and GoToMeeting. Most programs increased the frequency of educational sessions to compensate for the diminished clinical experiences. When available, programs such as SEM, family practice anaesthesia, emergency medicine, and care of the elderly joined the academic half days of their respective FRCPC colleagues in orthopaedics, anaesthesia, emergency medicine, and geriatrics. Creatively, many emergency medicine programs were able to develop virtual alternatives to in-person simulation sessions. Family practice anaesthesia residents were also encouraged to complete the Anesthesia Knowledge Test (AKT-6) as a motivator for self-study.

Most of these initiatives consisted of a transition from in-person to virtual platforms or utilization of existing educational frameworks. The SEM programs, however, uniquely capitalized on this virtual transformation to create a novel national education opportunity. The National SEM Resident Rounds was formed collaboratively by all ten SEM programs to facilitate knowledge exchange across the country and foster a sense of unity during the pandemic. Each week, a program was responsible for leading a two-

hour educational seminar on topics selected by residents with approval of their program director. The majority of the lectures were conducted by the trainees themselves in the hope of advancing their learning and developing their teaching skills.

Using Zoom, these lectures were successfully conducted across three time zones for over three months until the end of the academic year. Topics ranged from specific musculoskeletal concerns to mental health and the management of medical conditions in athletes. While not mandatory, the attendance of residents was consistently excellent, with additional viewership by the program directors and many practicing physicians. Following each seminar, the lecture recordings were uploaded to the private education database of the Canadian Association of Sport and Exercise Medicine (CASEM), which is available to all eligible members.

This national initiative represents a successful collaboration done under significant time and resource pressures, yet it was not without its challenges. Unfamiliarity with the new platform led to occasional delays. User participation in a virtual sphere was also a frequent challenge for presenters. These challenges were overcome, however, with incremental experience with the platform as well as the utilization of features including the message thread and polling.

Despite their educational value, the duration of these rounds detracts from time otherwise devoted to clinical experience. Conducting these rounds across three time zones presents an added hurdle for finding a time that minimizes the interruption. Yet, despite attendance being optional, there was no significant drop in attendance as clinics re-opened, suggesting learners perceived sufficient benefit from these rounds.

As the field of sport and exercise medicine returns to a new normal, training programs must decide the fate of these rounds. Should we continue, the rounds should undergo a thorough evaluation based on outcomes on skills, knowledge, and attitudes. Possible future directions include a centralized selection of lecture topics or the inclusion of evaluative components prior to and following each lecture. The selection of lecturers may also be broadened to include experts from across the country or abroad.

The rapid implementation of novel educational opportunities and transition to virtual education should be commended. Regardless of their future, they have successfully filled a gap in training caused by the COVID-19 pandemic. They have offered a source of learning and have fostered an environment in which residents could continue to engage with their supervisors and peers. By forcing familiarity with virtual platforms, these initiatives have additionally provided an unintended asset which may continue to prove valuable in the future.

Conflicts of Interest: The authors disclose no conflicts of interest.
Funding: The authors received no funding.

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