

# Sport and exercise medicine as a vehicle for advocacy? The Canadian perspective

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As sport and exercise medicine practitioners we have a unique opportunity to advocate for our athletes, our patients and our society. In this Canadian Academy of Sport and Exercise Medicine (CASEM)-led issue, we highlight several articles that serve as calls to action.

## CONCUSSION—CHARACTERISTICS AND CONSEQUENCES

What are the long-term effects of concussion? What are risk factors for a poor outcome from concussion? From Newcastle under Lyme's Keele University, psychology Professor Andrew Rutherford and colleagues explore the contentious debate over heading in football and risk of dementia in later life. Any rule changes made as a result of these concerns, they argue, would be based on opinion, not evidence; and reinforce the call for appropriately designed studies (*see page 321*). In a submission for BJSM's novel initiative, the PhD Academy Award, University of Michigan's Dr Kathryn O'Connor elaborates on factors that increase concussion risk and prolong recovery, and the role of mental health, from studying 800 concussions in 10 604 military cadets (*see page 368*). The take home message? Female cadets and cadets with greater somatic symptoms at baseline are at higher risk of concussion and may need specific interventions or monitoring; injury and environmental factors are what dictate prolonged recovery.

To make real progress in managing concussion in real life, CASEM is part of the Canadian Concussion Collaborative which includes, among others, the Canadian Medical Association (CMA)

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**Figure 1** The inaugural 'Medicine through Movement' conference will be held in Ottawa, Canada, on April 6th, 2019.

and Parachute Canada, a national charitable organisation dedicated to injury prevention (<http://www.parachutecanada.org/>). CASEM, the CMA and other stakeholders, have developed a Policy Document on Head Injury and Concussion. We'll promote the link on social media (@BJSM\_BMJ, @CASEMACSME and Facebook) the moment it goes live. CASEM and Parachute Canada have also developed a Position Statement on Concussion Baseline testing (<http://www.parachutecanada.org/downloads/injurytopics/BaselineTestingStatement-Parachute.pdf>).

In this issue, we also highlight a top Canadian researcher in the field, Professor Carolyn Emery from the University of Calgary (*see page 339*). A true advocate for injury prevention in sports, PT and PhD Emery has made hockey safer for children and adolescents by providing the scientific basis for rule changes that are policy in Alberta, Quebec and Ontario. Dr Emery is perhaps best known for her research on injury and concussion risk in youth ice hockey including evaluation of policy related to body checking.

## EXERCISE IN PREGNANCY—BENEFITS FOR BOTH MOTHER AND BABY

Another CASEM top priority has been the publication of the recent Canadian

Guidelines for Physical Activity in Pregnancy,<sup>1</sup> with contribution from CASEM's Dr Karen Fleming. These guidelines provide evidence for safe physical activity in pregnancy, for previously inactive women as well as those already active.

Two articles in this issue further elaborate on the effects of exercise during pregnancy: Canadian author Dr Michelle Mottola and colleagues explore how a 60 min exercise programme, performed three times a week, may reduce the prevalence of depression in late pregnancy and during the postpartum period (*see page 348*). Via their retrospective case-control study, Dr Thorgerdur Sigurdardottir (Iceland) and colleagues report that women participating in elite-level sport do not have higher rates of adverse delivery outcomes (including length of labour, need for caesarean section or severe perineal tears) (*see page 354*). The amount and quality of research coming out on this topic is promising, necessary and eagerly anticipated by many.

## PHYSICAL ACTIVITY AND HEALTH—TIME TO ACT

Who do you think is the best person to advise patients to exercise? A doctor? A physiotherapist? An exercise physiologist on referral? Dr Oz? In this issue Drs Alessandro Demaio and Anna Beale urge clinicians to embrace the opportunity we have to reinforce important health interventions such as physical activity to tackle non-communicable disease, instead of outsourcing these conversations with our patients—an approach which is 'fundamentally inadequate' (*see page 322*).

One solution is outlined in University of Gothenburg's Dr Aron Onerup and colleagues' systematic review of Sweden's national physical activity on prescription programme (*see page 383*). The Swedish approach is likely effective in increasing physical activity levels for insufficiently active adults, the authors conclude, and could be put into practice as part of routine healthcare.

CASEM authors produced a Position Statement on Physical Activity Prescription in 2016,<sup>2</sup> reflecting the importance we place on this topic. We look forward to April 6th, 2019, the WHO International Physical Activity Day, when CASEM will host a 'Medicine through Movement' conference in Canada's capital. Bringing together physicians from all specialities in medicine, we will explore the role of physical activity in both the prevention and management of physical and mental



**Figure 2** Vancouver, host city for the 49th CASEM Annual Conference.

health conditions, in all patient ages and levels of fitness. Many of our national medical associations will be taking part in this Canadian first.

#### **ATHLETE-CENTRED MEDICINE— VANCOUVER MAY 16–18, 2019**

Sport and exercise medicine physicians advocate for the overall health of the

patient/athlete, and the CASEM 2019 Conference, ‘Sports Medicine at the 49th Parallel’ reflects this. The conference will be held in beautiful Vancouver, Canada from May 16–18, 2019 and will feature affiliated courses including Primary Care Pearls, Sideline Emergencies, Anti-Doping Update and Endurance Sports Medicine. Highlights of the plenary include hot topics in sports medicine, mental health in sports medicine, cannabis use in sport and women's issues in sports medicine. The Opening Keynote Speaker will be 2000 Olympic Gold Medalist Daniel Igali.

CASEM offers quality continuing education, including the hands-on Sidelines Course (uniquely taught by a multidisciplinary team of medical doctors, paramedics and therapists), the rigorous Advanced Team Physician course, a new Para and Adaptive Sport workshop, excellent musculoskeletal ultrasound courses and more.

Looking back at nearly half a century of engagement with an ever-growing number of sport and exercise medicine physicians in Canada, the notion of advocacy for our athletes, patients and our communities is increasingly at CASEM's heart. A 50-year celebration will take place amidst the mountain splendour of Banff, Alberta in April 2020—save the month and stay tuned!

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**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Competing interests** None declared.

**Patient consent for publication** Not required.

**Provenance and peer review** Commissioned; internally peer reviewed.

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**To cite** Thornton JS, Burghardt M. *Br J Sports Med* 2019;**53**:319–320.

*Br J Sports Med* 2019;**53**:319–320.

Accepted 19 January 2019  
doi:10.1136/bjsports-2019-100596

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