Recommendations for a Pan-Canadian Concussion Strategy
Joint Submission from Sandhya and Swapna Mylabathula
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We would like to thank the Subcommittee on Sport-Related Concussion for the opportunity to share our perspective, and appreciate and commend this important decision to address concussion in Canada. In this submission, we discuss the current state of concussion knowledge and research, and present recommendations for inclusion in a Pan-Canadian concussion strategy based on our decade of advocacy, policy consulting, clinical training and contributions, and research activities. We include five main areas of focus, with recommendations for the role of the federal government for each theme.

PREAMBLE

Our names are Sandhya and Swapna Mylabathula (@steam.sisters on Instagram), and we have been involved in the field of concussions over the past decade as advocates, policy consultants, clinical trainee and contributor, and researchers. Swapna is an MD/PhD Candidate and McLaughlin Scholar at the University of Toronto, and her CIHR-funded research includes work on concussion policy and concussion in hockey. Sandhya is a PhD Candidate at the University of Toronto, a returning CIHR Fellow in Public Health Policy, and a current Governor on the University's Governing Council. She has investigated concussion risk factors, policy, education, sex/gender, and management in sports such as hockey, football, and rugby, as well as in a recreationally active population. Together, we codeveloped a Pan-Canadian Concussion Strategy and consulted on provincial concussion policy, and co-delivered a TEDx Talk on the topic. We are honoured to have been recognized as two of the top 50 Most Influential Torontonians (GridTO Magazine) and as Urban Heroes (Toronto Community News) for these contributions. We have continued our advocacy through our work in science communication as the @steam.sisters, including with the Royal Canadian Institute for Science as panellists and journalists, with Let's Talk Science as outreach site coordinators, on social media and television, and as guests and producers of various podcasts. We have shared our research and advocacy at regional, national, and international conferences, including the most recent consensus conference held in Berlin by the Concussion in Sport Group in 2016. We are grateful for the opportunity to share the research and perspective that we have built through these experiences, because we strongly believe in evidence-based policy and the importance of optimal health and well-being for all Canadians.

SUMMARY

In this summary of our brief, we present our recommendations from our examination of 5 key topics on concussion: Prevention, Management, Emerging Themes (Sex/Gender, Reporting Behaviour, and Subconcussions), Policy Research, and Education.

Prevention

We recommend that the federal government support:

- Policy ensuring sport organizations and schools contribute to a culture shift toward reduced concussion risk
- The development and implementation of prevention strategies (e.g. body-checking policies)
- Concussion prevention strategy research

Management

We recommend that the federal government encourage:

- Post-concussion psychological screening, to identify mental health concerns and increase our ability to address these concerns as/before they arise, further reducing the burden of injury on individuals and the healthcare system
- Education initiatives that include psychological sequelae of concussion
- Access to post-concussion care specific to both acute and persistent symptoms for all Canadians
- Sport organizations to require all student-athletes and stakeholders to complete concussion education
- Concussion management research

Emerging Themes

We recommend that the federal government support:

- Prospective and well-designed research and knowledge translation on sex/gender considerations
- Research that examines appropriate strategies to encourage reporting intention and programs that promote behaviour change
- Required sex/gender research training for all government-funded researchers
- Research that investigates the impacts of subconcussive blows and multiple head impacts to better understand how they influence management needs

Policy Research

We recommend that the federal government:

- Encourage concussion policy research
- Disseminate consistent messaging through policy, fostering conversation between federal, provincial/territorial, and municipal governments
- Support provincial/territorial concussion policy in elementary, secondary, and postsecondary education institutions which provide return-to-play and return-to-learn strategies, including academic accommodations
- Encourage policy that addresses concussion in school and non-school sport/physical activity
- Address regional inequities in policy implementation resources, so that urban, suburban, and rural schools have appropriate access to resources
- Ensure that policy includes regular evaluation to provide the opportunity for improving implementation
- Promote concussion tracking to facilitate evaluation

Education

We recommend that the federal government support:

- National education efforts and harmonization of information between school and non-school sport activities, including the development of national codes of conduct
- Research that examines the most effective education modality for each stakeholder group involved in concussion prevention, diagnosis, and management
- The development and implementation of multimodal, stakeholder-specific, and interactive education

- The inclusion of consistent and adequate concussion education for clinical trainees and practicing clinicians

Our concluding recommendation is that the federal government move forward with the three priorities identified in Bill C-566 in the 41st Parliament: 1) National Concussion Awareness Week, 2) Pan-Canadian Concussion Strategy (including a National Centre of Excellence for Concussion Research), and 3) Concussion Board (for evaluation and accountability). Canada has the opportunity to be a leader in the concussion policy landscape to prevent tragedies and promote well-being in its citizens, and we are encouraged by the formation of this Subcommittee and discussion thus far and hopeful for a near future in which we see a comprehensive national concussion strategy implemented across the country.