Beyond the Ice: Experience of a former pro hockey player and learnings to improve concussion care for children and youth

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### LAND ACKNOWLEDGEMENT

I would like to acknowledge that this presentation is taking place on Coast Salish People territory, for myself the Tsleil-Waututh Nation.

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## **OVERVIEW**

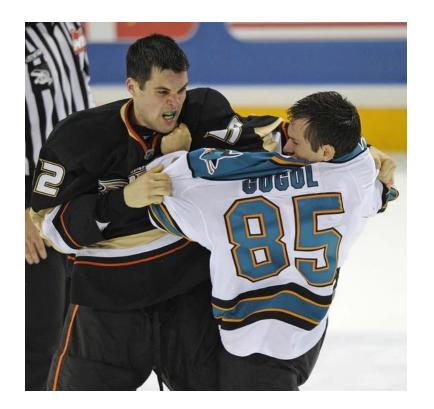
- My concussion story
  - Then
  - Now
- Pediatric Concussion
  - Why peds concussion is a big deal
- My research
  - Concussion among children and youth in BC





#### **HOCKEY CAREER**







# **INJURY HISTORY**

- Three concussions in 13 months
  - Two in WHL, one in NHL
- Returned to play too soon (x2)
- Post-concussion syndrome
  - 9 months
- Retirement at 19 years of age





















# **PEDIATRIC CONCUSSION**

UBC

### BACKGROUND

- A concussion is a type of traumatic brain injury induced by external forces → alteration in brain function (Silverberg et al., 2023).
- 46,000 cases of pediatric concussion diagnosed in Canada during 2016-2017 (CIHI, 2020).
- Concussions are *a significant health issue* for the pediatric population with the potential for long-term consequences.





# SYMPTOMOLOGY

- Domains of health = Physical, cognitive, emotional and sleep-related
- S/S can occur immediately or take time to appear
- Difficult to diagnose in young children (<6 years old)





### SPECIFICS OF PEDIATRIC CONCUSSION

- Pediatric concussions last longer than we think  $\rightarrow$  1 to 3 months
- Return to learn
  - Cognitive difficulties experienced by children (Macartney et al., 2018)
- Evolving technology reliance for children
  - It is okay to use technology after a concussion (Cairncross et al., 2022)





# CONCUSSION AMONG CHILDREN AND YOUTH IN BC



### DISCLAIMER

Access to data provided by the Data Steward(s) is subject to approval, but can be requested for research projects through the Data Steward(s) or their designated service providers. All inferences, opinions, and conclusions drawn in this presentation are those of the author, and do not reflect the opinions or policies of the Data Steward(s).



# **FOLLOW-UP VISITS**

- Follow-up visits are important for reassessment, management, and education, (Velinkonja et al., 2017).
- A follow-up visit is a visit with a health care provider, specifically a physician or nurse practitioner, after an initial diagnosis of concussion.
- Post-concussion care guidelines specify that a follow-up visit should occur within the first four weeks after an initial concussion diagnosis (Velinkonja et al., 2017).



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**Review Article** 

# Follow-up visits after a concussion in the pediatric population: An integrative review

Scott Ramsay<sup>a,b,1,\*</sup>, V. Susan Dahinten<sup>a,2</sup>, Manon Ranger<sup>a,b,3</sup> and Shelina Babul<sup>b,c,d,4</sup> <sup>a</sup>School of Nursing, University of British Columbia, Vancouver, BC, Canada <sup>b</sup>BC Children's Hospital Research Institute, Vancouver, BC, Canada <sup>c</sup>BC Injury and Research Prevention Unit, Vancouver, BC, Canada <sup>d</sup>Department of Pediatrics, University of British Columbia, Vancouver, BC, Canada

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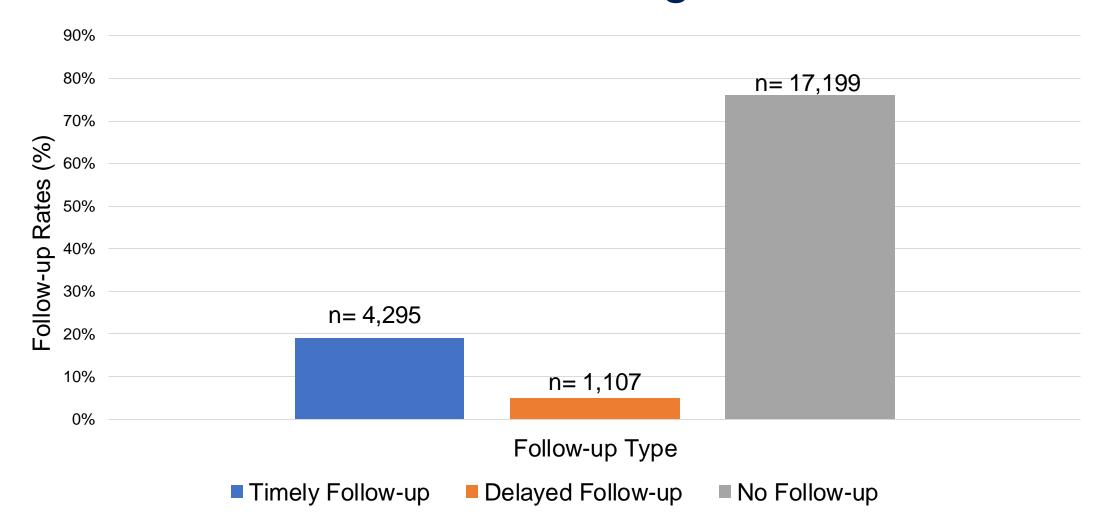
#### Most Concussed Children in British Columbia Are Not Followed Up: A Population-Based Study

Ramsay Scott; Dahinten Susan; Ranger Manon; Babul Shelina The University of British Columbia, Vancouver, Canada

RAMSAY, S., DAHINTEN, V. S., RANGER, M., & BABUL, S. (2023). MOST CONCUSSED CHILDREN AND YOUTH IN BRITISH COLUMBIA ARE NOT FOLLOWED UP: A POPULATION-BASED STUDY. JOURNAL OF HEAD TRAUMA REHABILITATION, 38(4), E328.

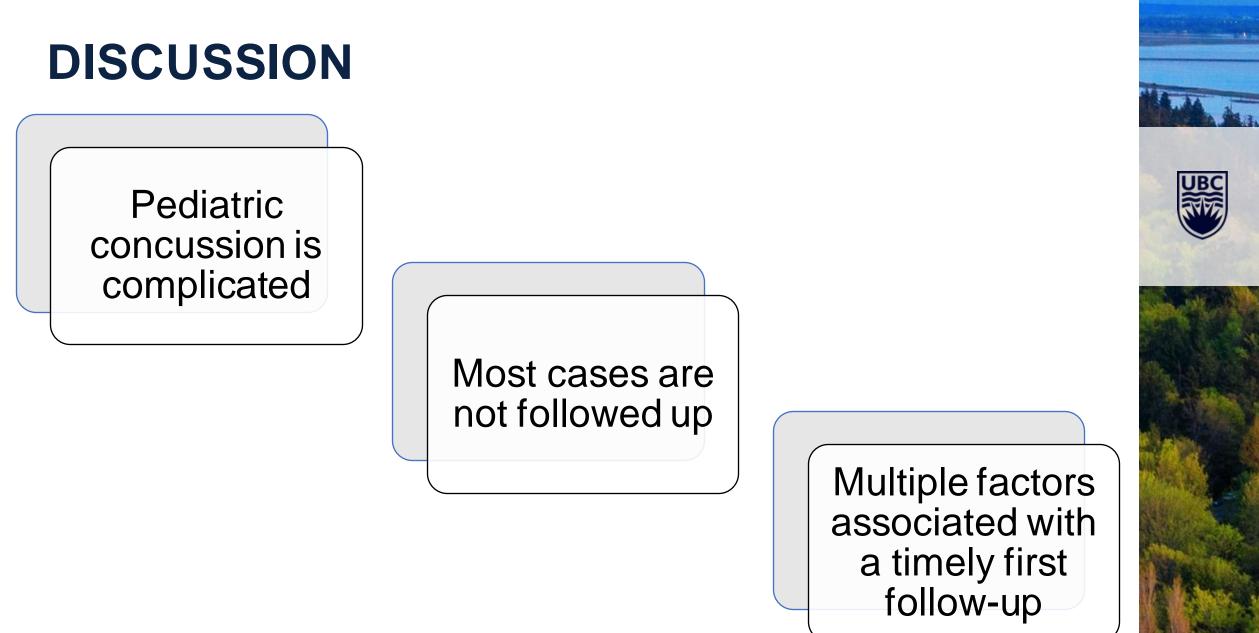
# Rates of Initial Follow-up Visits after Concussion Diagnosis

100%



# PREDICTORS OF TIMELY FOLLOW-UP

- Age = Youth
- Geographic residence = Rural
- Income quintile (Socioeconomic Status)
  - Lowest
  - Low
  - Middle
- Health care provider at initial diagnosis
  - General Practitioner
  - Emergency Physician



# THANK YOU

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