

“It’s not that bad”

Addressing the influences to concussion symptom under-reporting and removal from play in youth sport



Under-reporting or non-disclosure of concussion symptoms by youth sport participants, + coaches' failure to remove athletes from play, continues to be a challenging aspect of concussion management.

Reluctance to self-report or remove puts athletes at risk for further injury, and longer recovery.

A review of 36 studies revealed patterns of influences to the likelihood of youth athletes (12-17 years) disclosing symptoms, and coaches removing them from play.

It is important to address these influences in support of a 'culture of reporting and removal' for safer sport.

Influences to self-reporting and removal

- Research highlights both positive or driving influences and negative or restraining influences to the likelihood of youth sport participants disclosing concussion symptoms during practice or a game.
- Driving and restraining influences to athletes' self-reporting make for a complex environment in which they are expected to speak up about a possible head injury.

Driving influences to self-reporting

- Identify as a girl/female
- Participant-centered environment, where the athlete feels cared about
- Concussion education from multiple sources, at multiple time points



Restraining influences against self-reporting

- Uncertainty about concussion symptoms, severity of the injury
- Desire to play, succeed
- Don't want to let coach, teammates, parents down
- Important game
- Societal norms of toughing it out, "no pain, no gain," don't appear weak

Also, youth sport coaches are less likely to remove a participant from a game or practice if:

- They are uncertain about the symptoms indicated
- Not confident that it may be a concussion

"Is it a concussion, or dehydration or something else?"

Coaches rely on observing and asking athletes about the symptoms (which can be quite variable) while also monitoring the practice or game.

Uncertainty in this challenging situation means the athlete will likely be allowed to continue to play.

Support for a culture of self-reporting and removal from play



- Develop and sustain a participant-centered team/sport environment.
- Youth athletes' best interests and wellbeing are prioritized.
- Participants feel empowered to self-report concussion symptoms.
- Support coaches to lead and reinforce this approach.



- Continue concussion education for all.
- Include a focus on driving and restraining influences to self-reporting and removal.
- Use a variety of sources/formats, at multiple time points.



- Reframe disclosure as positive, 'get back to the game' sooner.
- Counter norms of playing through pain and toughing it out, by modeling desirable behaviour – *"It takes strength to speak up."*
- Address messaging and practices that applaud and reinforce harmful norms.



Alison Doherty Western University, Jeff Caron U. de Montréal, Stephanie Cowle Parachute, Debra Gassewitz SIRC, Annette Greenhow Bond University, Johnny Misley Ontario Soccer, Kaleigh Pennock U. Waterloo, Brendan Riggan U. Waterloo, Parissa Safai York University, Shannon Sibbald Western University, Brandy Tanenbaum Sunnybrook Health Sciences Centre, Mercedes Watson Coaches Association of Ontario

This info-graphic draws on research supported by:



Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada

Canada