

Attitudes towards and knowledge of concussion. A cross sport international survey conducted through social media.

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Aim:

Concussion is prevalent in sport. There are efforts to increase education around concussion to improve awareness and behaviours amongst participants. This study aimed to characterise these attitudes, knowledge and behaviours. It also aimed to identify factors that contribute towards this.

Methods

This study uses a questionnaire and recruited participants through social media over 10 months. Participants from all sports and all levels were included. The questionnaire established demographics, concussion history, concussion education, knowledge of concussion, attitudes towards concussion and predicted behaviours in response to concussion.

Results:

There were 613 participants. Mean age was 28.8 years. 81.9% were male. Rugby Union was the highest represented sport (n=344). 28.71% had a diagnosed concussion, 51.55% believed they had been concussed, without diagnosis. The rate was higher in contact sports (Rugby Union RR=1.43, Ice Hockey RR=1.89) and at higher levels of competition (RR=1.61). 57.10% of participants had received concussion education. Those playing at higher levels were more likely to have received education (RR=1.36). There was no correlation between higher-risk sports and prevalence of education ($R^2=0.6448$, $p=0.5440$).

The factor shown to improve knowledge and attitudes towards concussion the most was having received education on concussion. Educated participants identified more correct symptoms of concussion. Those who had received education were more likely to remove themselves from play if they thought they were concussed (RR=1.41), to report it to someone afterwards (RR=3.14) and to return to play safely (RR=1.96).

Conclusions:

Education is effective in improving understanding of concussion, and concussion behaviours. Education is more prevalent at higher levels of competition, however the majority of participants play at lower levels and may be at greater risk. Increased provision of education at lower levels may lead to reduced risk from concussion.