Athletes’ Knowledge of Concussions and the Decision to Seek Treatment
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Context: Between 1.6 and 3.8 million sport related concussions (SRCs) are recorded annually; however this may be an underestimate. Reasons for underreporting are of interest to sports medicine professionals and educators, as failing to report this injury has potentially devastating consequences. Objective: To investigate the prevalence of failure to report SRCs, reasons for failing to report, and to whom SRCs are reported to in college athletics. Knowledge of symptoms and demographic differences were also examined. Design: Retrospective, anonymous survey Setting: Online survey Participants: Six hundred and eighteen (618) NCAA Division I and Division III soccer and lacrosse athletes from the northeast United States responded to the survey; 603 (97.6%) completed all sections. Participants (female $n=358$, male $n=243$) aged between 18-25 ($M=19.8; SD=1.3$) and averaged 9.8 ($SD=3.9$) years of athletic participation. Interventions: Survey assessed knowledge, concussion history, and reporting behavior. Forty Division I and Division III coaches from men’s/women’s soccer/lacrosse teams were contacted via email to participate. Coaches’ subsequently forwarded the survey link to their athletes, who had six weeks to participate. Descriptive statistics recorded demographic information and knowledge quiz scores. Independent t-test compared the quiz scores in athletes with prior SRC experience to athletes with no history of concussions. Chi-square analysis compared athletes (Division I/Division III, soccer/lacrosse, male/female) on their likelihood of reporting SRCs. Main Outcome Measures: Dependent variables in the study included prevalence of athletes with previous concussions, reporting behavior, reasons why athletes failed to report and to whom they reported. Results: 42.3% of the participants who sustained at least one concussion had failed to report this injury once, compared to the 57.7% who reported their injury diligently. Reasons for failure to report included: “Didn’t want to be pulled out of the game or practice” (43.2%, $n=163$), “Didn’t think it was serious enough” (40.6%, $n=153$), “Didn’t know it was a concussion” (32.6%, $n=123$), “Didn’t want to appear weak,” (23.9%, $n=90$), and “Didn’t want to let down teammates/coach” (22.3%, $n=84$). Athletes reported SRC to athletic trainers (74.1%), Parents (68.3%), Coaches (59.0%), and Teammates (28.0%). Chi-square tests revealed no significant differences between gender on failure to report a SRC, but significant differences between sport type ($\chi^2 (1)=6.74, p<.01$), and division level ($\chi^2 (1)=5.05, p<.05$) indicates increased likelihood of failure to report in lacrosse/Division III. Athletes with ($M=17.13, SD=2.04$) and without ($M=16.60, SD=2.16$) previous experience with concussions scored relatively high on SRC knowledge quiz. Conclusions: Collegiate athletes are more knowledgeable of concussions than previously believed; other factors may influence the decision to report (including a conscious choice to withhold symptoms). Significantly more Division III/lacrosse athletes are likely to fail to report SRCs than Division I/soccer athletes. Word Count: 454 words.