

---

## COMMENTARY

# Examining Social Structures and Cultural Norms that Influence Brain Injury Reporting in College Football

*Kathleen Bachynski*

In this issue of the *Journal of Law, Medicine & Ethics*, Baugh et al. critically examine how key components of the college sports medicine environment influence athletes' care-seeking behavior. Their research goes beyond the patient-physician dyad to consider a wider range of influential stakeholders. Specifically, the interconnecting roles of clinicians, coaches, and athletic departments shape the environment in which athletes make health decisions. Based on a survey of 817 NCAA Division I football players, Baugh et al. find that athletes' level of trust and perceptions of conflicts of interest among these key stakeholders are associated with intention to report concussion symptoms.<sup>1</sup> They also notably observe that perceptions of conflict of interest were higher — while levels of trust were lower — among upperclassmen as compared with first-year students. This suggests the troubling possibility that increasing experience in the college sports environment diminishes both athletes' trust in key actors and their willingness to communicate potential traumatic brain injury symptoms. Consequently, understanding how administrative structures, formal policies and informal norms shape injury reporting is essential to ongoing public health efforts to address traumatic brain injury in sports.

The professionalization of sports medicine — and the resulting structural relationships that developed between medical professionals, coaches, and teams — helped set the stage for contemporary conflict of interest concerns in college sports. With the establishment of the National Athletic Trainers' Association in 1950 and the American College of Sports Medicine in 1954, athletic trainers and sports medicine physi-

cians increasingly received formal training and took positions with high school and college teams. With multiple obligations to athletes, teams, coaches, and schools, potential conflicts of interest quickly became evident. As a team physician for the Cleveland Cavaliers explained in 1975, while a treating doctor's primary obligation was to the athlete, "the physician also has an obligation to the coaches...because he must help obtain the maximum function of the athlete."<sup>2</sup> Baugh et al. note that an extensive body of literature has since developed on the external pressures sports medicine practitioners experience while providing medical care to athletes. Research suggests that this pressure is particularly acute when it comes to "invisible injuries." As one athletic trainer put it in a 2020 report, "I think the injury that I most commonly feel pressure from coaches [about] is concussions."<sup>3</sup>

The complexity of the collegiate sports medicine landscape also has deep historical roots in American norms surrounding competitive athletics. While the social and structural factors that impede traumatic brain injury reporting are evident across a wide range of sports, they are in many ways best exemplified by college football. The sport's particular history and cultural status in the US intensify the challenge of accurate traumatic brain injury reporting. The collision nature of football means the sport is associated with a higher risk of traumatic brain injury as compared to contact or non-contact athletics.<sup>4</sup>

From its nineteenth-century origins, tackle football was linked with a celebration of injuries as badges of honor; bodily risk was "constitutional in the appeal of the game."<sup>5</sup> The gridiron was treated as a "mimic battlefield" in which players were expected to expose themselves to physical hazards and make sacrifices for the greater good. In 1906, Harvard team doc-

---

**Kathleen Bachynski, Ph.D., M.P.H.,** is an Assistant Professor, Public Health Program, Muhlenberg College

tors reported, “concussion was treated by the players in general as a trivial injury and rather regarded as a joke.”<sup>5</sup> In this environment, athletes experienced pressure to refrain from seeking medical treatment for brain injury symptoms.

As football expanded and its ties to institutions of higher education deepened, this mentality persisted even as the risks to players’ brains grew. In particular, the mid-twentieth century addition of plastic helmets contributed to players’ use of their heads as a weapon. This technique, known as “spearing,” took hold despite warnings from many physicians and coaches of the risks. Some coaches nonetheless allowed or even

college football players as treating concussions as joke, athletes continue to dismiss or trivialize symptoms, taking cues from the institutional and social environments in which they compete.

Unfortunately, just as rule changes banning spearing did not reliably put a stop to the practice, contemporary efforts to reduce brain injury risks have also fallen short in the face of deep-rooted practices and structures. For example, in 2017 the NCAA eliminated two-a-day football practices in an effort to cut down on students’ exposure to repetitive head impacts. Yet researchers documented a subsequent *increase* in total head impact burden, potentially due to increased

**If institutions choose to offer students sports with substantial known brain injury risks, they bear the responsibility of ensuring that the professionals they hire to oversee those sports will address those risks honestly, with administrative support and meaningful structures in place to minimize conflicts of interest. Above all, to foster the trust that is necessary to enable health seeking behaviors, collegiate institutions must consistently and transparently prioritize student welfare. Nowhere is meeting this responsibility more urgently needed than in addressing the public health problem of brain injuries in sports.**

encouraged the practice. Yet other coaches contended that athletes could avoid injury while spearing by engaging in off-season exercises to strengthen their neck muscles.<sup>6</sup> The mixed messages limited compliance with efforts to put an end to spearing. Indeed, some evidence suggests that the actual incidence of spearing did not decline between 1975 and 1990, despite a 1976 rule change banning the practice in high school football. This highlights the importance of understanding informal norms that may conflict with formal guidelines.<sup>7</sup>

Despite recent strides in public and medical awareness of concussions as a brain injury, social pressures continue to hinder prompt and adequate treatment of brain injury symptoms. These norms in turn profoundly shape athlete trust, perceptions, and willingness to report brain injury symptoms. In December 2018, for example, one college football player described discussing brain injury: “It’s mostly, when we do talk about it, out of humor. ‘CTE,’ we say, ‘yeah, that means Committed To Excellence.’ We make jokes about it.”<sup>8</sup> (CTE actually stands for chronic traumatic encephalopathy, the irreversible neurological damage linked to repeated traumatic brain injury.) Over one hundred years after Harvard team doctors described

contact intensity (more head impacts per hour) at practice sessions.<sup>9</sup> Such findings reinforce the importance not only of adjusting formal rules, but also of fundamentally addressing the underlying cultural norms surrounding exposure to full-body collisions and brain injury risk.

By documenting the role of trust and athlete perceptions of conflict of interest, Baugh et al. have provided key data from which to launch this broader effort. Coaches, physicians, athletic trainers, athletic departments, and other key stakeholders must all be responsible for setting a culture where brain injuries are treated seriously. If institutions choose to offer students sports with substantial known brain injury risks, they bear the responsibility of ensuring that the professionals they hire to oversee those sports will address those risks honestly, with administrative support and meaningful structures in place to minimize conflicts of interest. Above all, to foster the trust that is necessary to enable health seeking behaviors, collegiate institutions must consistently and transparently prioritize student welfare. Nowhere is meeting this responsibility more urgently needed than in addressing the public health problem of brain injuries in sports.

---

## Note

The author has no conflicts to disclose.

## References

1. C. M. Baugh, E. Kroshus, W. P. Meehan, and E. G. Campbell, "Trust, Conflicts of interest, and concussion reporting in college football players," *Journal of Law, Medicine & Ethics* 48, no. 2 (2020): 307-314.
  2. K. Bachynski, *No Game for Boys to Play: The History of Youth Football and the Origins of a Public Health Crisis* (Chapel Hill: University of North Carolina Press, 2019).
  3. A. M. Pike Lacy, T. G. Bowman, and S. M. Singe, "Challenges Faced by Collegiate Athletic Trainers, Part I: Organizational Conflict and Clinical Decision Making," *Journal of Athletic Training* 55, no. 3 (2020): 303-311.
  4. G. T. Baldwin, M. J. Breiding, and R. Dawn Comstock, "Epidemiology of Sports Concussion in the United States," in *Handbook of Clinical Neurology* 158 (2018): 63-74.
  5. E. Harrison, "The First Concussion Crisis: Head Injury and Evidence in Early American Football," *American Journal of Public Health* 104, no. 5 (2014): 822-833.
  6. C. Shaughnessy, "The Football Coach and the Team Physician," *Journal of the American College Health Association* 15, no. 2 (1966): 113-120.
  7. J. F. Heck, "The Incidence of Spearing During a High School's 1975 and 1990 Football Seasons," *Journal of Athletic Trainers* 31, no. 1 (1996): 31-37.
  8. A. Asher, "Should Macalester keep playing football?" *The Mac Weekly*, December 6, 2018, available at <<https://themacs-weekly.com/2018/12/should-macalester-keep-playing-football/>> (last visited April 23, 2020).
  9. B. D. Stemper, A. S. Shah, J. Harezlak, S. Rowson, S. Duma, J. P. Mihalik, L. D. Riggen et al., "Repetitive Head Impact Exposure in College Football Following an NCAA Rule Change to Eliminate Two-a-Day Preseason Practices: A Study from the NCAA-DoD CARE Consortium," *Annals of Biomedical Engineering* 47, no. 10 (2019): 2073-2085.
-