



Mini Review

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“Human Cock Fighting”: The Culturally Acceptable Ritual of Violence in Sports



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Abstract

A considerable similarity among ancient and modern sports is the existence of violence and aggression in contests. Society as a whole seems to have long embraced sports that are violent in nature or that have violent elements. Intensity is inherent in certain sports. Physical force and even assault are part of sports like hockey, football, boxing, and rugby. Outside of sport, tackling or punching someone would be considered aggression, yet in the previously mentioned sports it is incorporated within the rules of the game. A concussion is a traumatic brain injury (TBI) induced by an impulsive force transmitted to the head resulting from a direct or indirect impact to the head, face, neck, or spinal cord. Repetitive TBI can trigger the development of chronic traumatic encephalopathy. The main purpose of this mini review was to primarily describe updated scenery on the cognitive risks associated with violence in sports, which may lead to degenerative disorders later in life. TBI may never be completely eliminated from sports. Reducing violent aspects might be a realistic modification of some sports. Properly trained coaches, athletic trainers, and medical staff are on the front line in concussion education, diagnosis, and management, and are essential in reducing the incidence and severity of sport-concussions.

Keywords: Traumatic brain injury (TBI); Traumatic encephalopathy (CTE); Sport-concussion; Neuropsychology; Culture

Introduction

As Eric Arthur Blair, a British author and journalist (known by his pen name, George Orwell), used to say: “serious sport has nothing to do with fair play, it is war without shooting”. Ancient Mesoamericans had their ball games, the Greeks had the Olympic Games, and the Romans had many spectator sports such as gladiatorial contests and chariot races. Economically speaking, US sports industry generated over \$400 billion during 2010, with the big four US professional leagues generating almost \$22 billion [1]. People watch sports for different reasons. For some spectators, sporting events simply provide entertainment, while for others it helps to attenuate the everyday tension. In addition, watching sports can be seen as a social activity, in which individuals of similar cultural or national backgrounds gather to have a community experience [2].

On the other hand, repetitive mild-to-moderate traumatic brain injury can trigger the development of chronic traumatic encephalopathy (CTE), a progressive neurodegeneration clinically associated with cognitive, functional and behavioral symptoms. Within CTE, there is an ordered and predictable progression of physiopathological abnormalities through the nervous system that occurs in conjunction with widespread axonal disruption and loss [3]. The main purpose of this narrative perspective (mini review) was to primarily describe the origin of

violence in competitive games and an updated scenery on the cognitive risks associated with CTE in sports, which may lead to degenerative disorders later in life.

The [violent] origin of sports: cathartic benefit of vigorous physical activity or declared self-destruction?

A remarkable similarity among ancient and modern sports is the existence of violence and aggression in contests. Theories hold that humans have an instinct for violence, developed during a time when early human ancestors had to resort to violence and aggressiveness to survive and reproduce. Also, these assumptions deal with the sociological aspects of violence in sports, stating that sports are “mock battles” which can become actual combats due to their competitive origin. A significant relationship between violence and sports in the ancient world derived from the connection between ancient sports and warfare. Sport had value as a technique for military preparation, and it also had value as a substitute for direct military conflict. Battlefield tactics required soldiers to be in exceptional condition, and fighting skills learned from combat sports were invaluable during times of armed conflict [4].

For a long time, academics have debated the relationship between war, violence, and sports. In this respect, there are at least two general perspectives. First, some researchers believe

that humans have a need to discharge their natural violent charge, which can be accomplished in war or in a substitute for war like violent sports. In the drive-discharge theory, war and sports are substitutes in the release of aggression [5]. Supporters of this theory would suggest that violence in ancient sports developed as a way to redirect the human need to discharge aggression toward a more contained and localized form of violence. Moreover, researchers believe that violence in sports merely reflects the aggressive tendencies of society; the cultural-pattern theory suggests that the more warlike a society is the more likely warlike sports will be found in that society [6].

Public and private acceptance of violence in sports: audience or accomplices?

Sporting contests have provided considerable entertainment throughout ancient and contemporary history. Society as a whole seems to have long embraced sports that are violent in nature or that have violent elements. The catharsis theory or the theory of purging of emotions suggests that the more violent the sport is, the greater the pleasure received for both the participant and the viewer. Much of the violence appears to be related to socioeconomic factors, such as social class, religion and regional issues. Discussions of fan violence in modern sports normally surround the issue of violent behavior of the fans of association football (soccer) teams, called "hooliganism" (a clear remnant of the violent origin of sports) [7].

Violent sport is supported and reinforced by a wide range of persons and groups. Given that many fans expect and enjoy violence in some sports, the leaders/public figures are thus likely to continue supporting fighting in the sport creating a vicious circle. Violence in sport is deeply rooted inside locker rooms, in coaching staffs, and teams' administration [8]. When ex-athletes accept positions as coaches, sport managers, and broadcasters, many former players continue supporting the same violent tendencies they experienced as participants. When fans, journalists, coaches, and teammates condone and show support for aggressive or violent behavior, seemingly such behavior is more likely to occur [9].

"Victorious warriors win first and then go to war, while defeated warriors go to war first and then seek to win": if one always wins, why sport does not teach about loss?

The most well-known ancient sporting event is the Greek Olympic Games (OG). It first begun as a religious festival consisting of athletic events, such as: foot races, discus throwing, combat sports (such as boxing, pankration, and wrestling), and equestrian events (such as chariot racing) [10]. Several of these sports have modern equivalents. Foot racing and discus throwing are still alive in the modern OG, as are boxing and wrestling. The ancient sport of pankration is the predecessor of modern Mixed Martial Arts (usually called MMA) competitions. Games became much more brutal and barbaric after the Romans conquered the Greeks. Games such as gladiatorial fighting and bullfighting were enjoyed by the Romans not as a way to show strength and

bravery of a fighter but rather to show how much one fighter can brutalize his opponent [11].

Sports have inherently violent aspects in its roots. In American football, for instance, blocking and especially tackling are often done violently, usually to intimidate the "opponent" (a term wrongly and normally used to indicate a colleague in the profession). An important element of hockey is the physical contact that comes from body checking, which is using the shoulder or hip to knock an opposing player against the boards. Hockey's most extreme form of violence, however, is the actual fighting (!) between players that for all intents and purposes is commonly accepted as part of the show. Scrums in rugby include elements of violence also, and boxing is clearly violent in that it consists exclusively of punching an adversary in an attempt to earn victory by causing enough physical harm to knock the other person unconscious [12].

"Nothing to cheer about" side-effects of such a strength

Currently, with the advance of medical technology, a cellular process called "neuro metabolic cascade" underlying the clinical presentation of a concussive injury describes a complex cascade of ionic, metabolic and pathophysiological events that is accompanied by microscopic outcomes [13]. Clinically, there are different signs and symptoms of a concussion that can be observed/measured. Headache is the most commonly reported symptom with dizziness, the second most common. Loss of consciousness only occurs in about 10% of concussions. Several symptoms of concussion are nonspecific; for example, nausea, vomiting and headache are a common presentation of acute gastroenteritis, and dizziness is a common symptom of acute cardiac compromise [14].

Majority of concussions resolve within 7–10 days. Nevertheless, in some cases symptoms persist for weeks, months or years beyond the initial event. It is difficult to define where concussion ends and postconcussion syndrome begins. The syndrome is simply defined as symptoms and signs of the concussion that persist for weeks to months after the focal incident [15]. CTE is a neurodegenerative disease associated with repetitive brain trauma and characterized pathologically by the accumulation of a specific protein in specific areas of the brain. CTE is not a continuum of a postconcussion syndrome or symptoms from an acute concussion, but rather develops years/decades after exposure to the mechanical trauma. Studies involving former American football players and soccer players who were active at the time of the data collection suggest an increased risk of chronic cognitive impairment with increased exposure to concussions and subconcussive insults to the central nervous system [16].

Changing cultural and social norms that support violence within sports: educational and legislative efforts.

Coherently, different cultural and social norms support different types of violence. Legislation can be a key-tool in

changing behaviour and perceptions of cultural and social rules (specially, when those are allegedly archaic). In the United States, an estimated 1.7 million people sustain a TBI annually, associated with 1.365 million emergency room visits and 275,000 hospitalizations annually, with associated direct and indirect costs estimated to have been \$60 billion [17]. Concussion-related legislation in many states requires education/re-education of young athletes, parents or guardians, coaches, and staffs, removal from play or practice at the time of a suspected concussion and written clearance for return to play protocol or practice by a licensed healthcare provider trained in the evaluation and management of concussions. Such laws provide a uniform standard for scholastic and nonscholastic sports organizations regarding concussion prevention, safety and management [18]. These laws should be viewed living documents to be modified as the best educational policies and practices are continuously developed, the most effective strategies for implementing and measuring compliance of these legal requirements are determined, and as new knowledge about sports concussions expands [19,20].

Conclusion

The rate of concussion has been increasing steadily over the past decades. In general, amateurs and competitors tend to have a higher risk of concussion in competition as compared to practice. In general, to reduce the incidence of concussion in sports is truly achievable. Properly trained coaches, athletic trainers, and medical staff are on the front line in concussion education, diagnosis, and management, and are essential in reducing the incidence and severity of concussions. Concussions and/or major injuries may never be completely eliminated from sports scope. Diminishing violent aspects might be a realistic modification of some sports, but making wholesale changes that eliminate all violent aspects is unlikely, as is banning a sport/physical activity completely. Apparently, the exaggerated use of vitality is an intrinsic part of ancient and modern sports and links to human nature over time. Further implications on the role of protective initiatives could prevent neurodegenerative disorders later in life.

Conflict of Interest

The author certifies that he has no affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

References

- Jewell RT (2011) Violence and Aggression in Sporting Contests: Economics, History and Policy, Sports Economics, Management and Policy 4.

- McKinney R (2016) Being Right Isn't Always Enough: NFL Culture and Team Physicians' Conflict of Interest. *Hastings Cent Rep* 46(2): S33-S34.
- McKee AC, Stern RA, Nowinski CJ, Stein TD, Alvarez VE, et al. (2013) The spectrum of disease in chronic traumatic encephalopathy. *Brain* 136: 43-64.
- Poliakoff MB (1987) *Combat Sports in the Ancient World*. Yale University Press: New Haven, CT, USA.
- Garcia A (2003) The psychological literature in Konrad Lorenz's work: a contribution to the history of ethology and psychology. *Memorandum* 5: 105-133.
- Wann DL, Carlson JD, Holland LC, Jacob BE, Owens DA, et al. (1999) Beliefs in Symbolic Catharsis: The Importance of Involvement with Aggressive Sports. *Social Behavior and Personality* 27(2): 155-164.
- Frosdick S, Marsh P (2005) *Football Hooliganism*. Willan Publishing: London, UK.
- Stephens D (2001) Predictors of aggressive tendencies in girls' basketball: an examination of beginning and advanced participants in a summer skills camp. *Research Quarterly for Exercise and Sport* 72(3): 257-66.
- Stephens D (2004) Moral atmosphere and aggression in collegiate intramural sport. *International Sports Journal* 8: 66-77.
- Jones JCH, Stewart KG, Sunderman R (1996) From the Arena into the Streets: Hockey Violence, Economic Incentives, and Public Policy. *American Journal of Economics and Sociology* 55: 231-43.
- Duke V (1991) The Sociology of Football: A Research Agenda for the 1990s. *Sociological Review* 39: 627-645.
- Jones JCH, Ferguson DG, Stewart KG (1993) Blood Sports and Cherry Pie: Some Economics of Violence in the National Hockey League. *American Journal of Economics and Sociology* 52(1): 63-78.
- Harmon KG, Drezner JA, Gammons M, Guskiewicz KM, Halstead M, et al. (2013) American Medical Society for Sports Medicine position statement: concussion in sport. *Br J Sports Med* 47: 15-26.
- Harmon KG, Drezner JA, Wilson MG, Sharma S (2013) Incidence of sudden cardiac death in athletes: a state-of-the-art review. *Heart* 100(16): 1227-1234.
- Mc Crory P (2009) Sport concussion assessment tool 2. *Scand J Med Sci Sports* 19: 452.
- Solomon GS, Haase RF (2008) Biopsychosocial characteristics and neurocognitive test performance in national football league players: an initial assessment. *Arch Clin Neuropsychol* 23(5): 563-577.
- Langlois JA, Rutland-Brown W, Wald MM (2006) The epidemiology and impact of traumatic brain injury: a brief overview. *J Head Trauma Rehabil* 21(5): 375-378.
- Adler RH, Herring SA (2011) Changing the culture of concussion: Education meets legislation. *PM R* S468-S470.
- <http://www.nflevolution.com/article>
- Mrazik M, Dennison CR, Brooks BL, Yeates KO, Babul S, et al. (2015) A qualitative review of sports concussion education: prime time for evidence-based knowledge translation. *Br J Sports Med* 49(24): 1548-1553.



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