# What's hot today? Current topics in sports and exercise medicine

David J Berkoff MD

This American Medical Society for Sports Medicine (AMSSM)-shaped issue of *BJSM* highlights 'hot topics' in sports medicine. The Merriam-Webster's dictionary defines 'hot' as: of intense and immediate interest. I used this simple definition to guide AMSSM's selection of articles for this issue. This issue's selections are clearly 'hot topics' but to whom are they considered 'hot?'

## HOT FOR WHOM?

What defines a sport and exercise medicine practitioner? Is it the team physician who cares for the professional or elite athlete? Is it the paediatrician who encourages the obese adolescent to put down the Wii controller and get outside? Or is it the cardiologist who dedicates herself to getting a heart failure patient back to tolerating light exercise? How does someone best describe what we do for our patients? We as 'sports and exercise medicine' providers have a unique role that encompasses multiple specialties, age groups and patient populations. We are tasked with prescreening athletes prior to activity, preventing and treating all manners of sporting injury. We care for the elderly, the young and those with chronic illness. We follow patients after injuries and are often the experts consulted with difficult and challenging medical cases that are both medical and sports related. We are a diverse group and we meet a wide range of needs. Thus, choosing what is 'hot' and relevant to everyone reading this AMSSM-shaped issue was challenging.

So how did we select these articles? There are hundreds of topics of interest to the sports and exercise medicine practitioner, but which of these are of interest to our readers and clinically relevant? To narrow this pool, I reviewed the past 2 years of *BJSM* issues. What I learned is that we, as sports and exercise medicine practitioners, are responsible for an overwhelming amount and variety of information. We write about the epidemiology of injury, mechanisms of bone and joint dysfunction; we investigate physical activity and how it relates to our youth, our infirm and our elderly. We write about concussion and neurological injury, nutrition and emerging treatments like platelet rich plasma (PRP) and stem cell therapy. I was charged with deciding which of these topics were hottest. In the end, I used relevance to our clinical practice as the over-riding selection principle.

## THE POWER OF PLACEBO

The emerging treatments such as PRP, orthokine and stem cell therapy are not directly represented in this issue. Whereas novel treatments are receiving increased attention in many sports medicine journals, I instead chose to review the power of placebo (http://dx.doi:10.1136/bjsports-2012-091472). The placebo effect and the need for the double-blind placebo-controlled trial was first described in 1955 by Henry Beecher.[1] This was elaborated on by Shapiro *et al*[2] and has since become the standard to which we compare all new interventions. A PubMed search today results in 4311 citations highlighted using the search term 'placebo effect.' To understand the value of a novel treatment we need to know how these therapies stack up to this powerful standard. Before we adopt a new treatment, we need to understand the influence of what we do and how we measure the persuasive power of placebo in affecting positive change.

## THE TEAM PHYSICIAN: IT ONLY GETS MORE COMPLICATED

At the 2012 AMSSM national conference in Atlanta, the presentation by Dr Tracey Viola was a highlight. Team physicians travel around the US providing care to athletes and staff.[3–5] Surely, intranational travel does not involve licensing and malpractice risks. To the surprise, and consternation, of many of us, Dr Viola outlined major licensure and malpractice coverage gaps (***see page 60***). Having to worry about how to legally perform our duties in other states makes our jobs more difficult. In addition, increasingly difficult is the complicated duty of the team physician to communicate confidential medical information. We are now fully immersed in the social media blogosphere. Facebook, Twitter, LinkedIn and a plethora of other often anonymous sources often leak medical information about our athletes. How do we control this flow of information? What happened to confidentiality and the doctor–patient relationship? Who is leaking these details and who is ultimately responsible for it? The article by Ribbans *et al* (***see page 40***) looks at what kind of information is making it to the media, and how this is potentially putting the treating practitioner at risk.

As I continued to narrow down the list of 'hot topics', I was left with three topics that were the most pervasive in the past issues: concussion, cardiology and physical activity and health. Each has a uniqueness to it and an international impact that cannot be ignored.

## CONCUSSION—AN EVOLUTION IN UNDERSTANDING

The AMSSM has spent the last year collaborating to assemble a society position paper (http://dx.doi:10.1136/bjsports-2012-091941). This document is an outstanding compilation of prior concussion data and research. The clinical experts involved have synthesised reams of information and created this exceptional position statement for our members and clinicians involved in concussion care. This paper will be an influential reference for practitioners worldwide. Equally important is the timing of this concussion statement with the recent 4th Zurich consensus meeting and its consensus paper being published in *BJSM*'s Concussion Themed Injury Prevention and athlete's Health Protection issue in March 2013. We are confident that the AMSSM position paper will stand along side the 2013 consensus statement as a reference for sports medicine practitioners everywhere.

## LONG QT SYNDROME: WHICH ATHLETES ARE REALLY AT RISK?

The high-impact research into sudden cardiac death and preparticipation screening by Dr Jonathan Drezner and his colleagues has brought a new level of attention to the quality and breath of research performed by the members of AMSSM. ECG screening is a hot topic worldwide,[6–8] and there exists significant debate regarding the precise protocol for preparticipation cardiovascular risk assessment. Dr Michael Ackerman, one of the world's leading experts in long QT syndrome (LQTS), has been studying this high-risk group of athletes for many years.[9] His manuscript published in this issue is truly eye opening (http://dx.doi:10.1136/bjsports-2012-091751). We gather information, do our best to interpret the results, but

UNC Department of Orthopaedics and Emergency Medicine, UNC School of Medicine, UNC Chapel Hill, North Carolina, USA

**Correspondence to** Dr David J Berkoff, 3142 bioinformatics bldg. CB 7055, UNC Dept of Orthopaedics, Chapel Hill, NC 27599, USA; david_berkoff@med.unc.edu

are we really saving lives or are we merely needlessly excluding young athletes from participation? Dr Ackerman's manuscript sheds new light on this regarding LQTS and restriction from participation. On the subject of sports cardiology, do not forget the special *BJSM* supplement on this topic in November 2012,[10] and next month's *BJSM* will have even more on this topic. It is hot and *BJSM* is the leading sports and exercise medicine journal for sports cardiology.

## PHYSICAL INACTIVITY IS THE #4 RISK FACTOR FOR MORTALITY WORLDWIDE. WHAT ARE WE DOING TO CHANGE THIS?

Physical activity saves lives! Physical activity and health is a *BJSM* focus as evidenced by the volume of articles that are published related to physical activity (PA) and obesity, youth, the elderly and much more.[11–14] Salt Lake City sports physician Dr Joy details how we take the next step from identifying physical inactivity as a problem to implementing solutions (http://dx.doi:10.1136/bjsports-2012-091620).

Complementing that paper, we have selected an article highlighting a simple single-question method for evaluating PA. If the process of determining PA is onerous, practitioners will not do it. Dr Milton *et al* (***see page 44***) show that a single question can be sufficient to determine if a patient's activity level is sufficient to benefit their health.

AMSSM is committed to clinical research and the education of sports medicine providers and has assembled one of the most exciting line ups ever for their upcoming National conference. We invite you to attend the 22nd AMSSM Annual Meeting from 17 to 21 April in sunny San Diego, California. We will highlight hot topics, clinically relevant content and original research submissions. Find out more at www.amssm.org. Also check the BJSM podcast where we discuss this special AMSSM issue and preview the conference in more detail.

See you in San Diego—register today!

**Funding** None.

**Competing interests** None.

**Provenance and peer review** Commissioned; internally peer reviewed.

**To cite** Berkoff DJ. *Br J Sports Med* 2013, **47**, 1–2.

*Br J Sports Med* 2013;**47**:1–2.
doi:10.1136/bjsports-2012-091965

## REFERENCES

1 Beecher HK. The powerful placebo. *JAMA* 1965:159:1602–6.
2 Shapiro AK. Etiological factors in the placebo effect. *JAMA* 1964;187:712–4.
3 Simon LM, Rubin AL. Traveling with the team. *Curr Sports Med Rep* 2008;7:138–43.
4 Whiteside J, Andrews JR. Trends for the future as a team physician: herodicus to hereafter. *Clin Sports Med* 2007;26:285–304.
5 Tucker AM. Ethics and the professional team physician. *Clin Sports Med* 2004;23:227–41, vi.
6 Coris EE, Sahebzamani F, Curtis A, *et al*. Preparticipation cardiovascular screening among National Collegiate Athletic Association Division I Institutions. *Br J Sports Med*. Published Online First: 13 September 2012. doi:10.1136/bjsports-2012-091356.
7 Pfister GC, Puffer JC, Maron BJ. Preparticipation cardiovascular screening for US collegiate student-athletes. *JAMA* 2000;283:1597–9.
8 Asif IM, Drezner JA. Sudden cardiac death and preparticipation screening: the debate continues-in support of electrocardiogram-inclusive preparticipation screening. *Prog Cardiovasc Dis* 2012;54:445–50.
9 Johnson JN, Ackerman MJ. QTc: how long is too long? *Br J Sports Med* 2009;43:657–62.
10 WHO http://www.who.int/dietphysicalactivity/factsheet_inactivity/en (accessed 30 Oct 2012).
11 Hussey J, Bell C, Bennett K, *et al*. Relationship between the intensity of physical activity, inactivity, cardiorespiratory fitness and body composition in 7–10-year-old Dublin children. *Br J Sports Med* 2007;41:311–6.
12 Kujala UM, Sarna S, Kaprio J, *et al*. Markku KoskenvuoNatural selection to sports, later physical activity habits, and coronary heart disease. *Br J Sports Med* 2000;34:445–9.
13 Hills AP, Andersen LB, Byrne NM. Physical activity and obesity in children. *Br J Sports Med* 2011;45:866–70.
14 Brown WJ, McLaughlin D, Leung J, *et al*. Physical activity and all-cause mortality in older women and men. *Br J Sports Med* 2012;46:664–8.