Sports medicine training in the United States

EDITOR,—The article “Sports medicine training in the United States” was recently brought to our attention. We applaud the journal’s interest in improving the public’s understanding of this complex area, but we are concerned about a number of serious misstatements on orthopaedic sports medicine training.

Firstly, the author states that orthopaedic sports medicine fellowship programs are not accredited and do not have curriculum requirements or standards for supervision. It is a point of public record by the Accreditation Council for Graduate Medical Education (ACGME)—the US entity responsible for accrediting fellowships in all specialty endeavours—that there are 53 accredited orthopaedic sports medicine programs. This compares with 64 accredited primary care sports medicine programs in emergency medicine, internal medicine, paediatrics and family practice, combined. All accredited programs are required to meet the programme requirements as established by the ACGME residency review committee, which includes educational and personnel standards. Moreover, the AOSSM fellowship committee—a committee of the whole for fellowship programmes—has adopted a curriculum to ensure that fellowship education is appropriately thorough and consistent.

Secondly, the author incorrectly characterises orthopaedic sports medicine training as generally teaching the surgical approach to sports medicine and not stressing the numerous other areas of athletic care. Although surgery is an important facet of orthopaedic sports medicine, it is a significant oversimplification to suggest that it is the only facet of the specialty. In fact, the aforementioned graduate medical education curriculum delineates what trainees should know with regards to anatomy, basic science (anatomy, biomechanics, and biology of healing), evaluation (history, physical exams, and imaging), and management (operative and non-operative) for virtually every region of the musculoskeletal system. Equally important, the curriculum goes beyond the musculoskeletal system to cover other medicine topics, including medical (such as cardiology, dermatology, pulmonology, and infection), nutrition, drug testing, environmental exposure, exercise physiology, athletic populations, paediatric and adolescent issues, preventive sports medicine, trauma, protective equipment, team physician management issues, and more.

Thirdly, the author suggests that the training and practice of the orthopaedic sports medicine specialist is less involved in the team setting. Late in 1999, the society surveyed its membership to better ascertain their involvement in orthopaedic sports medicine. Some 91% indicated that they served as a team physician, 8% on the field coverage only, 6% office based consulting only, and 77% both on the field and office based consulting. The types of teams these orthopaedists served is also interesting. 74% served high school teams, 62% served university teams, 46% served community teams, 35% served professional teams, and 18% served Olympic or international teams. In total, sports medicine comprised 57% of their professional activities, divided between clinical care (42%), team service (7%), teaching/consulting (5%), and research (3%).

Finally, we think that the most significant hallmark of sports medicine in the United States is that it incorporates the expertise of many specialists in the care of athletes. Every area of specialisation—primary care and non-primary care—has inherent strengths and limitations which we believe are important to recognise in providing athletes with optimal care. For this reason, AOSSM, the American Academy of Family Physicians, the American Medical Society for Sports Medicine, the American College of Sports Medicine, the American Osteopathic Academy of Sports Medicine, and the American Academy of Osteopathic Sports Medicine developed a consensus delineating the responsibilities of a physician that focuses on qualifications and responsibilities and not just specialty degree. Implicit and explicit in this statement is the recognition that sports medicine is not the domain of any one specialty.

We hope that this brief elaboration provides a more complete appreciation of sports medicine training in the United States.

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Flexibility versus stretching

EDITOR,—Dr Schur1 brings up an apparent discrepancy between my article,2 which suggests that stretching does not prevent injury, and that of Reid and McNair,3 which suggests that stretching may be beneficial in rows. This is an apparent discrepancy for two reasons. First, the literature discussed stretching immediately before exercise and not stretching in general. To my knowledge, there have only been two studies on stretching at times other than before exercise, and, although they both suggested it may be beneficial, both studies had limitations, and more research is needed before definitive conclusions can be made. Secondly, the author of Reid and McNair does not cite any research in which stretching has been shown to prevent injury. Rather, the argument is based on biomechanical concepts, which may or may not translate into an actual reduction of injury. That being said, I also agree with Dr Schur that there may also be differences between stretching to increase range of motion beyond what is necessary for activity, which includes most people who stretch before exercise, and stretching to increase range of motion when it is limited.

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AUTHOR’S REPLY

I would like to make a couple of comments. Firstly, I would like to emphasise the point that I was making in my original letter. When discussing an ill defined procedure, as exemplified by “stretching”, it is important to be precise about what is being done to what, when, and for how long for comparisons to be made or for valid debate to proceed.

Secondly, I agree that further studies need to be done, but care must be taken with exact definitions. I have heard it suggested that, in the context of slalom kayaking, both overstretching and understretching may be contributory factors in shoulder injury. In a complex biomechanical system, both statements may be equally true, depending on what one is considering in the kinetic chain.

I hope that this contributes to the debate.

PAUL E SCHUR

Fitness leader effectiveness

EDITOR,—While conducting research for my Masters degree in Counselling and Guidance, I was particularly interested in the approach adopted by fitness leaders/instructors when dealing with people wishing to start exercising.

My experience, and consequent understanding, of the typical approach used in fitness facilities is that the fitness leader adopts an “expert” role within the literature and this can be equally true, depending on what one is considering in the kinetic chain. Listening develops greater empathy, and empathy helps individuals to understand their ambivalence. This, in turn, can lead to a resolution of the ambivalence that seems to hold many in a state of indecision when they consider taking up exercise. I find little research to suggest that counselling for exercise involves little more than giving information and advice. The process of helping to facilitate change is often called for much more than this, and
should include a respect for autonomy, adoption of a non-judgmental attitude, genuineness, and empathy, all of which are key and core counselling qualities.

Fitness instructors may also do well to ask themselves why they got into the industry. Many say that they love to help others get fit, but here’s the paradox: those who appreciate their expert advice are generally more ready to exercise in the first place and need little help in doing so. Those who are less ready seem to be in most need of help with the change of behaviour and this requires a completely different approach which matches the mind set of this group.

To really “help” and really make an impact on the greater number of those who do not exercise, fitness leaders need to re-address their whole understanding of the issue of exercise “counselling”. I recommend they read Motivational Interviewing, 1 Health Behaviour Change, or Changing Eating and Exercise Behaviour. 2

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BOOk REVIEW


This, the second edition, has been thoroughly updated and revamped (see the section on Achilles tendons!). It is a superb book for the clinician working with athletes, outlining the treatment of injuries in a straightforward and clear way. It is such a change to read a book written by physicians rather than surgeons, with consequently a much more functional approach! This book should be read by all sports physicians and physiotherapists in training and should be by the desk of anyone likely to treat athletes’ injuries, GPs and specialists alike.

The first part “Fundamental principles” is excellent for someone starting out in sports medicine, but reminds us all of the basics. It lists more sites of stress fractures than most of us will see in a clinical lifetime, with hints on management. The “Regional problems” (part B) is more comprehensive than in any other book I have read with important “not to miss” problems, making it very easy to build one’s own differential diagnosis. The layout could not be easier to follow, with a hugely detailed contents list at the start and good index, and the book is well referenced with advice for further reading.

There are also sections on “Sports performance”, “Special groups” (the section on the disabled is brief but good), “Medical problems in sport”, and “Practical aspects of sports medicine” — the doping screening, etc. So nothing is left out. If there is a fault it is that the clinical section is too small a part of the whole.

This book will sell like hot cakes, and be on every course reading list.

Analysis
Presentation
Comprehensiveness
Readability
Relevance
Evidence basis
Total
18/20
16/20
17/20
20/20
15/20
86/100

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First aid in motor sport (video). Motorsport Safety Fund, PO Box 239, West Malling, Kent ME19 4BL, UK. (£10.00 including post and packing.)

This video is designed to cover first aid practices in motor sport. The authors claim that it is aimed at giving everyone involved in all disciplines of motor sport a basic understanding of first aid. Having watched the video through twice, I remain unclear as to whether this aim is actually achieved.

Clearly in a 13 minute video, one cannot hope to cover first aid in any detail. Therefore people who watch the video need to be familiar with first aid beforehand. Why would you then watch such a video? Perhaps as a quick update of the issues before a sporting event. I would think for most first aiders this information is almost too basic and would suspect that they may gain little from the exercise.

The problem is that the video concentrates primarily on the basics of first aid—that is, the “ABC” approach as well as other issues of hypothermia, burns, and so forth which are covered in a very superficial way. As such, the appropriate market for the video may be participants, marshals, or others not directly involved in medical care, to give them at least a passing familiarity with this area. Unfortunately to cover helmet removal and so forth, thereby taking the role of a non-trained person too far. Perhaps the video may serve as an introduction to a first aid update or requalification course, but then many of the segments would require detailed discussion and explanation. Having said all that, it is a well produced product which, to me, does not have a simple market in motor sport safety.

I was disappointed that, although it is supposed to be about motor sport, very few action shots of motor accidents are shown and most of the first aid is stock standard stuff not necessarily related to motor racing. There is little information specific to motor sports for example, extraction of injured drivers from vehicles—mainly because this area rightly needs further training. There is a discussion of helmet removal in the vehicle; however, I was slightly uneasy as to whether this is an appropriate recommendation for an introductory first aid video. Although a doctor is shown directing the process, I am not sure that it is relevant for basic first aid. There are clearly situations where it is necessary, but this perspective was not clear to me from watching the video.

Toward the end of the video, a spectacular crash is shown with a rally car tumbling down a steep ravine and landing upside down in a river. As a race medical doctor, this sent chills down my spine as to the logistics of medical care in such a situation. The only issue discussed then is drowning, and the scene jumps to an unconscious driver already out of the vehicle on level ground. The video then shows the first aider pushing heavily on his back to expel any water in his mouth before rolling him over to perform EAR. No mention is made of the ABCs at this point or whether the diagnosis needs to be assessed. Simply the treatment of a drowning is the focus of the segment. I was also surprised about the pushing on the back as the initial step. I obviously need my first aid skills brushed up on this point, and, coming from a country where drowning/near drowning is a common occurrence on our beaches, I will follow this unusual approach up with our local authorities. Perhaps the video should emphasise the point that, regardless of a potential spinal injury in such situations, a clear airway is the primary goal.

In my hometown, we are lucky enough to have a F1 Grand Prix every year, and the elite medical care available is impressive both to observe and take part in. At smaller motorsport racing events where the medical care is limited, the need for appropriately trained first aiders and marshals is paramount. The Motorsport Safety Fund does a fantastic job promoting safety issues in this sport. They produce a range of videos, manuals, booklets, tabards, etc. of the highest standard as well as a regular newsletter. Anybody involved in the sport would do well to be in contact with this organisation.

I am not sure that this video is the answer to motor sport safety. It is too superficial for the experienced motor sport first aider, does not cover specific extraction or other medical issues for rescue crews, and, to me, the market for such a product is unclear apart from a quick overview for participants and marshals. With that caveat, there are issues discussed that go beyond their level of expertise. The video has many strengths, however. It does reinforce the basics of first aid, is very professionally produced, and the advice is practical rather than didactic. As a quick overall update of the ABCs, it is simple and to the point.

Analysis
Presentation
Comprehensiveness
Readability
Relevance
Evidence basis
Total
15/20
5/20
12/20
10/20
10/20
52/100

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www.bjsportmed.com
The conference will present scientific information on the epidemiology, on site management, treatment, grading, and prevention of concussion in sport.

Further details: Darlene Scheurich, International Ice Hockey Federation (IIHF), Parkinson 11; 8002 Zurich, Switzerland. Tel:+41 1 289 8614; Fax: +41 1 2898629; email:scheurich@iihf.com.

5th Annual Football Association's Coaching Association Conference.
8 November 2001; Liverpool, UK.
Supported by the Football Association and the World Commission of Science and Sports.
Further details: Dr Mark Williams, Research Institute for Sport and Exercise Sciences, Liverpool John Moores University, Henry Cotton Campus, 15–21 Webster Street, Liverpool, L3 2ET, UK. email: m.williams@livjm.ac.uk.

II European Federation Sports Medicine Congress 14–17 November 2001; Oviedo, Spain.
Further details: Tel: +34 902 103 873; Fax: +34 902 120 880; email: info@g2c3.com.

Advanced Team Physician Course 6–9 December 2001; Palm Springs, California, USA.
Further details: AOSSM; www.sportsmed.org.

Beyond the Horn: Australian Pain Society.
24–27 March 2002; Sydney, Australia.
Exploring the journey of pain between the periphery and the brain, from basic clinical practice.
Further details: DC Conferences; Tel: +61 (0)2 9439 6744; e-mail: mail@dconferences.com.au.

2nd World Congress Postgraduate Sports Medicine, 8th Int. Congress Science of Sport 23–28 April 2002; Colima, Mexico.
Further details: Conference Secretariat, PO Box 6396 Dunedin, New Zealand; Tel: +64 3 477 7887; Fax: +64 3 477 7862; email: smnznat@xtra.co.nz.

Concussion in Sport 2–3 November 2001; Vienna, Austria.
International symposium organized by the International Ice Hockey Federation (IIHF) in cooperation with the International Olympic Committee Medical Committee, and the Federation Internationale de Football Association Medical Assessment and Research Center (F-MARC).
Sports medicine training in the United States

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