LETTERS TO THE EDITOR

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The editors will decide, as before, whether to also publish it in a future paper issue.

Impact of professionalism on injuries in rugby union

EDITOR,—We were concerned to read about the alarming increase in injury in Scottish rugby union football. In their article, Garraway *et al* report the results of a 1997–1998 survey of senior Scottish club players, which, when compared with the findings of a 1993–1994 survey, indicate a substantial increase in the incidence of injury. The authors attribute this increase to factors associated with the advent of professionalism in rugby union football.

Garraway et al consider a number of possible explanations for their findings and then conclude that "the factor that is most likely to have contributed to the increased burden of injuries in competitive play and requires the most urgent attention is the almost universal adoption of protective equipment in rugby union between the 1993–1994 and 1997–1998 seasons." The questions this raised for us was: did the researchers question players about protective equipment in the two surveys and if so did they find an increase in the wearing of such equipment?

Later in the article, Garraway et al assert that "players at the professional level have turned to the use of this equipment during competitive matches in the expectation that it will minimise the consequences of bodily impact and may even give them a psychological edge when using their increasing physical presence to tackle opponents" and that "amateur players are already following their example." These assertions raise further questions for us: were the participants in the surveys questioned about their motives for wearing padded equipment and/or their beliefs regarding its effects on their risk of being injured? How is the risk of injury modified for players who enter contact situations confidently compared with players who approach contact more tentatively? Are confident players more or less likely to use correct technique in contact situations?

Two recent reviews have concluded that little is known of the psychological effects (advantageous or otherwise) of wearing protective equipment in rugby.² The most common reasons for wearing protective equipment given by participants in a New Zealand study were: to prevent injury (57%), because of previous injury (53%), and because of medical advice (21%).⁴ Australian schoolboy rugby players also cited safety as the primary reason for using headgear and reported that they played more confidently when wearing headgear.⁵

On the basis of their conclusions regarding the impact of padded equipment on the incidence of injury, Garraway et al recommend that the International Rugby Board "place a moratorium on the further development of protective equipment until it has been established that it is not contributing to the substantial increase in player morbidity associated with the introduction of professional rugby union." In their abstract, they go further by recommending that the moratorium should be placed on the "use of protective equipment in competitive matches".

There is at present little evidence to suggest that padded equipment modifies the risk of injury in rugby. We have no argument with the need to find explanations for the disturbing increase in injury reported by Garraway et al. What concerns us is that their recommendations have been made in the absence of supporting evidence, and that in making such recommendations attention is diverted from other explanations for the observed increase in injuries, such as law changes that affect the way in which rugby is played. Investigation of the effects of padded equipment on injury risk, through well designed research, is required before recommendations about its use can be made. Placing a moratorium on the use of protective equipment may make it difficult to undertake such research!

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- 1 Garraway WM, Lee AJ, Hutton SJ, et al. Impact of professionalism on injuries in rugby union. Br J Sports Med 2000;34:348–51.
- 2 McIntosh AS, Best J. Review of medical aspects of Law 4 Player Clothing and Personal Protective Equipment. Unpublished interim report. School of Safety Science, The University of New South Wales and Australian Rugby Union, Sydney, Australia.
- 3 Verhagen ALM, van der Beek AJ, van Mechelen W. The effect of padding in the prevention of rugby injuries: a review of the literature. Unpublished report, Department of Social Medicine, Vrije Universiteit, Amsterdam, The Netherlands.
 4 Gerrard DF, Waller AE, Bird YN. The New
- 4 Gerrard DF, Waller AE, Bird YN. The New Zealand Rugby Injury and Performance Project. II. Previous injury experience of a rugby-playing cohort. Br J Sports Med 1994;28: 229–33.
- 5 Finch CF, McIntosh AS, McCrory, P. What do under 15 year old schoolboy rugby union players think about protective headgear? *Br J Sports Med* 2001;35:89–94.

Proportions of activities in a climbing gym

EDITOR,—I refer to the paper on indoor rock climbing by Wright *et al.*¹ Firstly, thanks to the authors for adding some valuable information to the under researched area of indoor

climbing injuries (particularly given the popularity of this activity world wide).

While I have no doubt that many of your participants put leading or bouldering as the activity that they spent most time doing while in the gym, I would have significant doubts that that is actually the case, particularly in lower grade climbers. I suspect that the participants in the study may well have overestimated the amount of time they spent in each activity, and that an analysis of actual time spent would reveal more time spent on a top rope than any other activity. This is a possible explanation for the otherwise unexpected findings when looking at the "preferred activity" as a predictor of overuse injury.

I do agree with the idea that many "committed" climbers will spend more time bouldering and leading than the noncommitted, but this should logically be a factor to some extent related to grades climbed, not independent of skill level.

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1 Wright DM, Royle TJ, Marshall T. Indoor rock climbing: who gets injured? Br J Sports Med 2001;35:181–5.

Authors' reply

Thanks to David Humphries for his comments on our paper. We agree that our respondents may have overestimated the time they spent leading and bouldering in comparison with top roping, although, if this is the case, we should ask why. Bravado, perhaps wishing to appear bolder than they actually are, or memory error, seem the most likely explanations. Memory error, resulting in this case in misclassification bias, is a potent source of error in epidemiological studies, a bias to which our study is no less susceptible than others reliant on memory based replies. If the misclassification is all in one direction-that is, some people stated that their most common activity was leading and bouldering when it was in fact top roping, and no one made the opposite error-the true odds ratio for leading and bouldering in comparison with top roping would be lower than that which we found. We have not performed a sensitivity analysis to estimate the degree of misclassification that would reduce the coefficient of this variable to nonsignificance.

We have one further comment to make in relation to Humphries' remarks about "committed" climbers. We have already pointed out that we cannot regard our sample as a true cross sectional representation of the indoor climbing population. In particular, it seems unlikely that "team building" clients from the commercial sector would attend such an event, and possibly not school groups, or at least not in the proportions that they are believed to represent of a rapidly expanding market. In this sense, we suspect that almost all our respondents would be "committed" climbers, but the word has a different sense here from the way Humphries has used it.

> DEBORAH WRIGHT JAMES ROYLE TIM MARSHALL

Sports doctors' resuscitation skills

EDITOR,-I cannot resist the temptation to join the debate on sports doctors' resuscitation skills.^{1 2} The study by Thompson et al³ suggested that there is a perceived need among sports specialists for first aid skills. However, I received no response to my letter concerning this4 which indirectly posed the question, "should doctors who attend aquatic sports be able to deal with a suspected cervical spine fracture and recover the casualty?" Obviously, that is the task of a lifeguard in the same way that first aid at non-aquatic events is the task for a first aider, but perhaps doctors should be competent first aiders and/or lifeguards. This was never in the medical school curriculum and perhaps that should change. At least, first aid training is part of sports medicine courses, but I would like to suggest that lifeguarding should also be included. I would also suggest that all doctors at aquatic events should hold the NPLQ, NBLQ, or at least bronze medallion and bronze cross of the RLSS or overseas equivalent.

Should the organisers of any sports medicine course want advice on this, they should contact the RLSS at River House, High St, Broom, Alcester, Warwickshire B50 4HN, UK. I would be happy to help out but would make two stipulations: everyone on the course should feel obliged to join the RLSS and they should sponsor me for my next fund raising event for the RNLI.

PAUL SCHUR Wiggo Cottage, 135 Main Road, Wybunbury, Nantwich, Cheshire CW5 7LR, UK usualperch@doctors.org.uk

- 1 Lavis M, Rose J, Jenkinson T. Sports doctors' resuscitation skills under examination: do they take it seriously? Br J Sports Med 2001;35:128– 20
- 2 Bottomley MB. Sports doctors' resuscitation skills under examination: additional facts. Br J Sports Med 2001;35:283.
- 3 Thompson B, McNally O, Neill SO, et al. What is a sports medicine specialist? A pilot study. Br J Sports Med 2000;34:243–4.
- 4 Schur P. What is a sports medicine specialist? Br J Sports Med 2000;34:474.

BOOK REVIEWS

Marathon medicine. Ed Dan Tunstall Pedoe. (Pp 340; £19.95.) London: Royal Society of Medicine Press Limited, 2000. ISBN 1-85315-460-1.

This is the best book on the marathon that I have ever read. It is composed of a series of chapters based on lectures delivered at a British Heart Foundation symposium on marathon medicine held in London in 2000. The content includes a wide range of disciplines: history, sociology, psychology, medicine, physiology, and more.

It is noted in the introduction that the reader will be treated to the views of a veritable galaxy of experts. This is no false claim.

What a pleasure it was to read this book—comprehensive, direct, accessible, and practical are only a few relevant adjectives applicable to this text. It even kept me awake on a Sydney to London flight! Beautifully presented with clear figures, singular in its lack of waffle, and very well referenced, this is the ultimate guide to so many aspects of what many consider to be the greatest race. In addition to the wealth of information contained in the chapters proper, I quite appreciated the inclusion of short sections of discussion between conference attendees and the experts which were included at the conclusion of some chapters.

Having personally struggled through a number of these events, I especially looked for practical information. Will it kill me? Probably not. Will I live forever if I complete one? No. What should I drink and eat? What about altitude training? Why do I fatigue? The answers, or our best current knowledge, are all there.

This is an excellent book. I am half way through it on the second reading. I would buy it myself and recommend it to all of those who care for participants in, or who are interested in, endurance sport. It is suitable for sophisticated athletes and both students and practitioners of sports science and sports medicine.

Analysis

Presentation	18/20
Comprehensiveness	18/20
Readability	18/20
Relevance	18/20
Evidence basis	18/20
Total	90/100

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High altitude medicine and physiology. 3rd ed. M P Ward, J S Milledge, J B West. (Pp 434; £69.00.) London: Arnold, 2000. ISBN 0-340-75980-1.

"We have tried to strike a balance between being too academic on the one hand and competing with the pocket guides on high altitude emergencies on the other" proclaim Michael Ward, James Milledge, and John West, three internationally respected authors on the subject of high altitude medicine. Their third edition is an attractively covered book, its suprising weight giving suitable notice of the serious reading within.

Each chapter starts sensibly with a list of contents followed by a carefully worded summary. I found this increasingly useful as the majority of text favours the clinical specialist and high altitude physiologist. By chapter six I was struggling with $M = (P_A - P_V) Q \hat{a} (1 - e^{-DV} - Q \hat{a})$. Those of you who recognise this as relating to the total transfer of a gas will be at one with this book. I suspect the majority of readers will silently thank the authors for providing those chapter summaries.

In the midst of this text I could sense John West's influence predominate, with the profusion of scientific tables and graphs sprinkled with references to the pioneers of high altitude physiology, and it was in these scientific chapters that the authors seemed most at ease. As a GP with an interest in mountain rescue, I found the latter third of the book

much more relevant. The conditions of high altitude pulmonary oedema and cerebral oedema (HAPE and HACE), hypothermia, exhaustion, and fatigue are covered in workable detail, and there is useful information on how clinical conditions such as diabetes, COPD, and IHD are affected by high altitude.

So have the authors succeeded in their aim? On balance this is of more interest to the research scientist or high altitude specialist rather than readers like myself. There are cheaper (much) books that cover the clinical aspects at least as well, but none so logically laid out, beautifully presented, or as thoroughly researched (I counted 1557 references!). One for the serious high altitude buff who won't even see the price tag.

Analysis

Presentation	17/20
Comprehensiveness	17/20
Readability	15 /20
Relevance	10/20
Evidence basis	18/20
Total	77/100

FRED MACSORLEY

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Sports medicine for specific ages and abilities. Eds Nicola Maffulli, Kai Ming Chan, Rose Macdonald, Robert M Malina, Anthony W Parker. (Pp 471; £49.95.) Edinburgh: Churchill Livingstone, 2001. ISBN 0-443-06128-9.

I was excited when I saw this book as the five authors are all well known to me as prominent in their respective fields. Nicola Maffulli of Stoke on Trent via Aberdeen and Hong Kong is an orthopaedic surgeon with a special interest in children's injuries, Kai Ming Chan from Hong Kong is a widely published orthopaedic surgeon, Rose McDonald has been prominent in sports physiotherapy in the United Kingdom for many years, Bob Malina from Michigan State University is one of the foremost experts in children's growth, and Tony Parker has been a leading FIMS official for many years.

Their stated aim is "to address in one volume the specific problems of different categories of individuals in sport". The four groups considered were the young, the old, the female athlete, and the disabled athlete—all important subgroups with specific problems of their own. These four groups usually get a chapter each in general sports medicine books, so one would hope that these areas would be considered in significantly more detail in this publication.

The children's section covers all the important issues such as growth and maturation, strength and endurance training, nutrition, and competitive stress. The sections on injuries have some inaccuracies—for example, in the section on navicular stress fractures describing the pain as "well localised to the apex of the foot" and prescribing rest only in the treatment, and the use of a rigid Boston brace in all cases of spondylolysis—but they are generally well covered.

The female section also covers all the major issues but is quite repetitive, with three different chapters all covering menstrual irregularities. The section on aging and master athletes (surely that should be masters

athletes) includes such topics as bone metabolism, strength training and balance, as well as exercise and surgical management of osteoarthritis. The final section, physical activity in disability, takes a broad definition of disability and covers topics such as exercise in cardiac rehab, low back pain, diabetes, peripheral arterial disease, in addition to the more traditional disabled athlete topics.

As well as the five editors, there are 64 other chapter authors or coauthors. As a result there is some inconsistency and repetition.

I had two other concerns about the editing of the book. The first is that there seem to be some chapters placed in the wrong sectionsfor example, a chapter on "anabolic steroid use in adolescents" is in the disability section instead of the section on children and adolescent athletes, and "exercise prescription for amputees" is in the aging and master athlete section rather than the disabled section. This smacks of careless editing. The other gripe is that there are a number of chapters that do not seem to bear any relation to any of the four areas. They include a chapter by Jenny McConnell on "faulty alignment and posture", and one on "biomechanical problems of the lower limb—the key to overuse injury" by Australian podiatrist Simon Bartold. These two chapters are actually the best chapters in the book but seem to be thrown in for good measure rather than because of relevance to the topic.

All in all, this book covers important areas but suffers from too much repetition and poor editing. I am not sure that it covers the topics much better than some of the good sports medicine texts.

Analysis

Presentation	10/20
Comprehensiveness	6/20
Readability	12/20
Relevance	12/20
Evidence basis	10/20
Total	50/100

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Clinical risk management: enhancing patient safety. 2nd ed. Ed Charles Vincent. (Pp 573; £47.50.) London: BMJ Books, 2001. ISBN 0-72791-392-1.

Clinical risk management is a strange subject which will perplex many readers. If this was a book about cricket, it would have chapters on no balls, wides, missed stumpings, and accusations by Indian bookmakers, but it probably would not talk about how to be a successful cricketer. As a result, some readers will be a bit put off by both its lay out and content. However, for those who already practice high quality medicine, this text offers an opportunity to refine their practice further.

To a large extent, clinical risk management grew out of the need to address issues arising from litigation against individual doctors and health services—an influence that still strongly underpins this volume. A somewhat broader view, that there are inherent risks in all medical practice and we must learn how to deal with them appropriately, also strongly influences this book and represents the future

of clinical risk management. This will not only reduce adverse events for patients, but will also have the pleasant side effect of reducing litigation.

The most interesting aspects of this book are those that apply the principles and issues of risk management to individual clinical disciplines. The reviews in areas such as oncology, psychiatry, and emergency medicine are well thought out and well referenced, providing useful information to enable clinicians to further reduce adverse events in their specialty and the consequences of those adverse events.

While not quite having reached Bible status, this book provides an extremely comprehensive introduction to the area of clinical risk management for the novice, and also would be highly useful as a reference for individuals seeking to know more about clinical risk management. While probably not quite making it to bed time reading, it is a book where each chapter or area can be read in its own right. It is certainly a book that every clinical risk manager should have access to, and I would recommend that clinicians read their specific chapter. In future editions, this area of the book I am sure is destined for expansion.

Analysis

Presentation	15/20
Comprehensiveness	17/20
Readability	18/20
Relevance	14/20
Evidence basis	15/20
Total	79/100

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CALENDAR OF EVENTS

Sports Injuries Management of the Shoulder

8 December 2001, School of Physiotherapy, Manchester, UK

NSMI in partnership with ACPSM

Further details: Isabel Lancoma, NSMI; Tel: +44 (0)20 7251 0583 ext. 219; email: isabel.lancoma@nsmi.org.uk

Competency Course in Musculoskeletal Ultrasound

7-9 January 2002, Oxford, UK

Further details: Alison Davies, Department of Radiology, Nuffield Orthopaedic Centre, Oxford OX3 7LD, UK; Tel: + 44 (0)1865 227765; Fax +44 (0)1865 227347; email: alison.davies@noc.anglox.nhs.uk

II International Congress on Physical Education, Sports Medicine & Exercise Science

14–17 January 2002, Donapaula, Goa, India Further details: Dr Jasraj Singh, Organising Secretary, LNIPE Gwalio, India 21, Lakshmibai National Institute of Physical Education Shakti Nagar, Gwalior 474002 M.P

47002 INDIA; Tel: +91 751500932/340588; Fax: +91751 410504; email: jasraj@sancharnet.in

Website: www.alumni-lnipe-gwalior.com

The Sixth International Paralympic Committee Scientific Congress

4-6 March 2002, Salt Lake City

Further details: Michele E. Brown, P.O. Box 45002, Salt Lake City, Utah 84145–002, USA; email: michele.brown@saltlake2002.com

6th World Conference on Injury Prevention and Control. Injuries, Suicide, and Violence: Building Knowledge, Policies, and Practices to Promote a Safer World.

12–15 May 2002, Montreal Convention Center, Montreal, Canada

The purpose of the conference is to bring together the stakeholders to facilitate exchange between sectors and disciplines; promote the sharing of knowledge and intervention models and encourage partnerships between the public and private sectors.

The conference will include plenary sessions on topics of concern to all professions (for example, the influence of the media on the safety of populations: the role of policies and laws) and state of the art presentations focusing on their respective fields. Simultaneous translation of these sessions and the opening and closing ceremonies will be available in French and Spanish. Additionally, as the focus is to facilitate exchange, parallel sessions (oral presentations, round tables, and debates) and poster sessions will be organised around six major themes: Road Safety, Occupational Safety, Sport, Leisure, Home, Institutional and Product Safety, Suicide Prevention, Violence Prevention and Post-trauma care and Rehabilitation.

Further details: Carol Pincox-Langevin; Tel: +1 514 848 1133; Fax: +1 514 288 6469; email: trauma@coplanor.qc.ca

Web site: www.trauma2002.com

World Conference on Women and Sport 16–19 May 2002, Montreal, Ouebec

Further details: Deena Scoretz (secretariat), IWG Secretariat, 15 Eddy Street, 8th Floor Hull, QC K1A OM5, Canada; Tel: +1 604 999 0989; Fax: +1 819 956 8019; email: dscoretz@infoserve.net

Website: www.iwg-gti.org

49th ACSM Annual Meeting

20 May 2002 to 1 June 2002, St. Louis, Missouri

Further details: Fax: +1 (317) 634-7817

Physical Therapy 2002

5–8 June 2002, Cincinnati, Ohio, USA Further details: 2002 Annual Conference Program Committee, C/o Professional Development, APTA, 1111 North Fairfax St. Alexandria, VA 22314–1488 USA

12th Commonwealth International Sports Conference

19-23 July 2002, Manchester, UK

Further details: Conference Secretariat, HIT Conferences, Cavern Court, 8 Mathew Street, Liverpool L2 6RE, UK; Tel: +44 (0)151 227 4423; Fax: +44 (0)151 236 4829; email: sport@hit.org.uk

Website: www.hit.org.uk/sport/home.htm

Fourth World Scientific Congress of Golf 23–26 July 2002, St Andrews, UK Further details: World Scientific Congress of Golf Trust, The Scores, St Andrews KY16 9AT UK; Tel: +44 (0)1334 475560; Fax: +44 (0)1334 474322; email: golfscience@st-andrews.ac.uk

Website: www.golfscience.org.

Sports Medicine Course

3–10 August 2002, Vancouver, Canada Further details: Cathy Means; Tel: +1 608 263 6637; Fax: +1 608 262 8421; email: cjmeans@facstaff.wisc.edu

XVI IEA World Congress of Epidemiology

18–22 August 2002, Montreal, Canada Further details: Conference Secretariat, Events International Meeting Planners, 759 Square Victoria, Suite 300, Montreal, Quebec, H2Y 2J7, Canada; Tel: +1 514 286 0855; Fax: +1 514 286 6066; email: info@eventsintl.com

Website: www.iea2002.com

Sports Medicine of Australia 2002 Australian Conference

12–16 October 2002, Carlton Crest Hotel, Melbourne, Australia

Further details: Prue Robertson, Project Officer, Sports Medicine Australia, PO Box 237, Dickson ACT 2602; Tel: +02 6230 4650; Fax: +02 6230 5908; email: prue.robertson@sportnet.com.au

The 5th Asian Federation of Sports Medicine Congress

24–27 October 2002, Seoul, South Korea Further details: AFSMC 2002 Seoul Secretariat, Hanjim Travel Service Co Ltd, (c/o

Young CHANG) Marine Center New Bldg 5th Fl, #51, Sogong-dong, Chung-gu, Seoul 100–770, South Korea; Tel: +822 726 5555; Fax: +822 778 2514; email: ychang@kaltour.com

Website: http://www.afsmc2002.or.kr

Second World Congress of Science and Medicine in Cricket

4–7 February 2003, University of Port Elizabeth, South Africa

Further details: Dr Richard Stretch, University of Port Elizabeth, PO Box 1600, Port Elizabeth 6000, South Africa; Tel: +27 41 5042584; Fax: +27 41 5832605; email: sparas@upe.ac.za

Vth World Congress on Science & Football

April 2003, Lisbon, Portugal

Further details: Dr J Cabri; email:
Jcabri@fmh.utl.pt

Website: http://www.fmh.utl.pt/wesf

The LTA Sports Science and Sports Medicine Conference

19–20 June 2004, London, UK

NOTES AND NEWS

www.basem.co.uk

The British Association of Sport and Exercise Medicine has launched its new website—

www.basem.co.uk. The site provides information on the educational opportunities in sport and exercise medicine, and advice to those wishing to be involved in this area. BASEM members can also access the latest information of BASEM events.

www.UKSI.net

The UK Sports Institute (UKSI) is currently developing a password restricted website—www.UKSI.net—for the elite professional sporting community including athletes, coaches, and those in sport science and medicine. The site will be commissioning experts to write articles on a variety of topics. Each article will be aimed at the entire audience, promoting the integrated philosophy of the UKSI.

Bayesian statistics and evidence based medicine

Evidence based medicine is the buzzword of the day. But in fact, the standard statistics that are used in almost all studies do not answer the questions that are of interest to the clinician, even though they are misinterpreted as if they do. A new website www.physio. mcgill.ca/smcourse/bayesian is now available that compares the inferences that can be drawn from standard statistics with those that can be drawn from the Bayesian statistical approach. The authors welcome all questions and comments. This site is designed for both clinicians and epidemiologists.



Impact of professionalism on injuries in rugby union

Kenneth L Quarrie and David J Chalmers

Br J Sports Med 2001 35: 450 doi: 10.1136/bjsm.35.6.450

Updated information and services can be found at: http://bjsm.bmj.com/content/35/6/450.1

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