EDITORIAL

Narrowing the gap between science and practice



Discussions about evidencebased practices in sports medicine often include the question whether practitioners who interact regularly with athletes should be guided by science, or whether scientists should take heed of what these experienced practitioners are doing and then set out to prove whether their approach is beneficial or not. As far as I am concerned the answer is a no-brainer. My view is

based on the fact that there are well over 70 international journals dedicated to sports medicine/exercise science. The top journals publish over 100 papers per year. While many of these research studies fall into the category of 'basic science', with limited applicability for reducing the risk of injury or improving performance, many studies have outcomes which are applied and can guide clinical practice. Most top quality journals have a section at the end of each paper which highlights and summarises the practical applications of the study. There is so much information on a variety of topics in sports medicine and exercise science that any treatment or intervention can be guided by evidence derived from experimentation. However, this view of science guiding practice is not shared by everyone. This is demonstrated by the gap which exists between the evidence derived from experimentation and the practice of some support staff when dealing with athletes. Consider for example the practice of coldwater immersion after training and competition. A recent survey showed that 83% of the support staff of elite rugby players in South Africa used cold-water immersion for managing recovery after matches.¹ This practice occurs despite the evidence from a variety of studies being equivocal² or even negative from an adaptation perspective.³ Another example is the use of anti-inflammatory drugs where the use of these drugs for muscular injury far exceeds the recommendations based on scientific evidence.⁴ Does this mean that the quality of the science is poor and does not mimic the 'reallife' conditions, or does it mean that the practitioners have their own agenda which occurs independently of scientific findings? The answer to this question needs some debate - failure to close the gap between science recommendations based on a scientific approach and the actual practice of the support staff will impede development and deprive the athlete of the best available treatment.

On another note, this first edition of the journal in 2010 brings about the changing of the guard. We have to bid farewell to the editorial board who have served the journal in an admirable way for 12 years. Our sincere thanks go to Professors Maurice Mars, Yoga Coopoo, Kathy Myburgh, Tim Noakes, Geoff Rogers and Kit Vaughan, who have contributed to the journal in various ways. Their collective wisdom, experience and status have made a valuable contribution to the development of the journal. The new guard has a tough act to follow! We welcome to the editorial board the new members Dr Kerith Aginsky (University of the Witswatersrand), Dr Theresa Burgess (University of Cape Town), Dr Richard de Villiers (Drs Van Wageningen and Partners, Somerset West), Dr Lize Havemann-Nel (North West University), Dr Christa Janse van Rensburg (University of Pretoria), Dr Louis Holtzhausen (University of the Free State), Professor Frank Marino (Charles Sturt University, Australia) and Dr Babette Pluim (Royal Netherlands Lawn Tennis Association, Netherlands). The collective skill of this group should serve the next phase well, as the journal develops further and meets the changing demands of the profession. With the new editorial board we also have a new relationship with the British Journal of Sports Medicine. This relationship allows us to publish 'editor's choice' articles which have previously been published in the British Journal of Sports Medicine. We have included two such papers in this edition of the journal ('Non-steroidal anti-inflammatory drugs in sports medicine: guidelines for practical but sensible use', and 'Eccentric loading for Achilles tendinopathy strengthening or stretching?') - both papers are excellent and make a valuable contribution to narrowing the gap between science and practice, as discussed above.

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REFERENCES

- Van Wyk DV, Lambert MI. Recovery strategies implemented by sport support staff of elite rugby players in South Africa. South African Journal of Physiotherapy 2009; 65(1):1-6.
- Bleakley CM, Davidson GW. What is the biochemical and physiological rationale for using cold-water immersion in sports recovery? A systematic review. Br J Sports Med 2010; 44(3):179-187.
- Yamane M, Teruya H, Nakano M, Ogai R, Ohnishi N, Kosaka M. Postexercise leg and forearm flexor muscle cooling in humans attenuates endurance and resistance training effects on muscle performance and on circulatory adaptation. Eur J Appl Physiol 2006; 96(5):572-580.
- Paoloni JA, Milne C, Orchard J, Hamilton B. Non-steroidal anti-inflammatory drugs in sports medicine: guidelines for practical but sensible use. Br J Sports Med 2009; 43(11):863-865.