The challenge ahead – using our intellectual capital to achieve success in sport



This fourth issue of the South African Journal of Sports Medicine for 2005 is a bumper issue with original research papers from 4 different research units around the country. This is a healthy sign for sports medicine/exercise science research in South Africa.

Another healthy sign was the initiative of SA Rugby which hosted a medical and

scientific consensus conference in Cape Town on the 8-9 November 2005. The conference was attended by doctors, physiotherapists, biokineticists, conditioning coaches, exercise scientists and team coaches invoived in rugby. The theme of the conference was to address the perceived problem of 'burnout' in rugby players. This phenomenon in rugby has been poorly characterised in the past because of the varying nomenciature used by the support staff. A coach, for example, would define 'burnout' as a loss of form or staleness, whereas a doctor or conditioning coach would define it as an increased risk of injury or an inability to train hard. After some hearty discussion in the break-away groups of the different professions it was realised that there was more agreement of opinion than disagreement. The consensus agreement arising from this discussion was as follows:

- 1. There is a maximum exposure to the rugby environment that each player can sustain in a season before symptoms of underperformance and increased risk of injury develop. Some South African players will exceed this threshold in a season.
- This threshold may vary depending on the level of play, the player's position, mental and physical characteristics and exposure to training, match time and travel.
- 3. Consistent monitoring of the players will identify those players who are approaching their threshold.

It was agreed that the working definition of this 'burnout' type condition was: 'A syndrome in rugby players caused by continuous exposure to a rugby environment* and which is associated with underperformance* and increased risk of injury and or illness'. (* rugby environment - includes training, matches, travel and all other activities associated with rugby; *underperformance - impaired performance related to training and matches, including decreased psycho-social functioning.)

All support staff and coaches at the meeting also agreed that all players needed an obligatory rest period at the end of the season. This was defined as 8 weeks of recuperation during the off-season including 1 week at the end of the season for medical assessments, followed by 2 weeks of complete-rest and at least 4 weeks of rehabilitation and individual conditioning away from the rugby environment.

Plans were established to compile a monitoring system to assist support staff in managing 'burnout'. This system will be tested in a pilot study in the first half of 2006 and will then be discussed at the next SA Rugby meeting in June 2006. It will be made available to teams once consensus has been reached on its suitability.

Another highlight of the meeting was the guest speaker, Dr Mark Sayers, a biomechanist employed by the All Blacks as a technical coach. He showed how effective one can be when the transition is made between sports science and coaching. He highlighted the contrasting goals of a sports scientist (i.e. academic recognition, need to control all variables, sophisticated processing of results, maintaining integrity of data collection, peer-reviewed output) versus the goals of a coach (i.e. to develop a winning team at all costs, need for timely results, scientific input that interferes minimally with training, results that can be practically applied and that are easily understandable). At first glance these respective goals seem divergent, however Sayers was able to demonstrate that this need not be the case, providing that scientists communicate their findings in a jargon-free way and that the scientific support is athlete-centred and coach-While we are honing our communication skills in supporting the coaches we also need to adapt to the changing conditions. Do we opt for second best and be content with following, or do we set the trends? The national rugby team has shown the successful consequences of having a unique playing pattern. However, the results from the recent northern hemisphere tour also show that other teams catch on quickly and the game plan, which was unique 6 months ago, is now an open secret shared by the major teams. To remain ahead one has to adjust continually. To be consistent high achievers we need to use our intellectual capital to serve the sport. The challenge is there for us all!

The Journal would like to thank Dr Demitri Constantinou for all the hard work he did as president of SASMA and wish the new president, Dr Ismail Jakoet, all the best for his tenure.

Mike Lambert Editor-in-Chief