

# No pain no gain? A conversation on Olympians' long-term health

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Willie Banks OLY is smiling, he usually is. Olympian, former world record holder and world champion. Inventor of the now ubiquitous track and field competitor overhead hand clap. Successful businessman and international sports leader. Life has been good thanks to elite-level sport. There's just one snag, Willie has osteoarthritis in his knees and hips. He is in constant pain and attributes his osteoarthritis to past sporting injuries. Willie is not alone. Olympians and former elite athletes often link their past sporting injuries to their current musculoskeletal pain.

## ADDRESSING THE BALANCE: RISK VERSUS BENEFIT

There are many benefits to a life devoted to elite sport, with numerous studies reporting the positive effects of sport including a lower risk of morbidity, better self-reported health in later life and higher quality of life.<sup>1-4</sup> Despite this, major injuries including anterior cruciate ligament tears and substantial meniscal tears can contribute to radiographic and symptomatic osteoarthritis,<sup>5-8</sup> and the risk of osteoarthritis in elite athletes may be higher than that in the general population.<sup>4</sup>

This reality raises questions. Is enough being done to educate and support athletes and their entourages so they can minimise the long-term consequences of sporting injuries? What resources are allocated to research, to understand and prevent the onset of diseases such as post-traumatic osteoarthritis, and to mitigate any negative health outcomes associated with a

life lived at or near the top? Where does the duty of care of coaches, clinicians, Olympic committees and sporting federations, to the stars of the sporting stage begin and end? (Figure 1)

## SUPPORTING OLYMPIANS

The World Olympians Association (WOA) is an international organisation with a mission to connect and support the global alumni of Olympians of all ages, nationalities and sports. As recognition of their outstanding achievements WOA provides postnominal letters OLY to Olympians. Since its launch in November 2017, over 13 500 Olympians representing 184 countries out of a global population of approximately 100 000 have registered for OLY recognition.

In 2015, stories like Willie's inspired the formation of the WOA Medical Committee. This committee is composed of Patrick Schamasch (chair), Richard Budgett OLY, Fabio Pigozzi, Brian O'Driscoll, Jonathan Snell, Nick Webborn, Malav Shroff OLY and is driving a strategy to improve both the long-term physical and mental health of Olympians.

As the first step of this strategy, WOA commissioned the Retired Olympians Musculoskeletal Health Study (ROMHS) to better understand the long-term benefits and consequences of elite sport. ROMHS is a collaboration of global clinical and research experts led by Debbie Palmer OLY. Self-report data collected from 3 357 Olympians are being analysed alongside data from the general population to expand our knowledge about the

unique health of retired elite athletes. The paper in this edition of BJSM is the first in a series of manuscripts from ROMHS that highlight key issues underlying the long-term health of Olympians. This paper and the ROMHS data provide preliminary evidence that can be used to inform discussion and recommendations among stakeholders such as National Olympians Associations (NOAs), International Sport Federations (IFs) and National Olympic Committees (NOCs).

## PRIORITISING THE LONG-TERM HEALTH OF OLYMPIANS

Long-term athlete welfare is an emerging field of research, and there is still much to learn about the health of retired athletes. To ensure the findings of research in retired athletes are valid and robust current efforts could benefit from greater cross-sport and cross-discipline collaboration. As has been observed in prospective studies from football, rugby and the Olympic Games, clinical and academic researchers should standardise injury and disease (eg, osteoarthritis) definitions and reporting, as well as harmonising methods of data collection. The use of appropriate, matched controls, in order to understand what is unique to retired elite athletes versus a normal ageing population, should also be included more regularly within academic studies.

Many Olympians want to improve their long game and are willing to contribute data and share experiences to studies like ROMHS but real-world improvement cannot occur without the engagement of the wider sports community.

Willie and the tens of thousands of Olympians need engagement from a broader community of stakeholders too, to work with them through WOA and others to ensure that their health is understood and prioritised. These efforts must include more data driven conversations about the long-term health of elite athletes across the fields of sports

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**What would Willie say to his younger self?**  
*It's worth it so don't quit. Try to find the best way to protect yourself and recover. And be careful how you train. Play the long game.*

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**Figure 1** Willie banks OLY. Two-time Olympian (1984 and 1988) in triple jump for USA. Silver medallist at the International Amateur Athletic Federation World Championships Helsinki 1983.

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medicine, performance and academia. An international forum on long-term athlete welfare led by the WOA and the International Olympic Committee, incorporating NOCs, NOAs and IFs may also accelerate the process. Commitment of resources including money and time are necessary to find ways to reduce the pain to gain ratio. If these communities can work together, everyone in sport will benefit and it won't just be Willie who is smiling.

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