Sports cardiology, Part 2: Using scientific data to make informed decisions

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The wide range in societal perceptions regarding the benefits of exercise, or lack thereof, is reflected in two famous comments:

"Lack of activity destroys the good condition of every human being, while movement and methodical physical exercise save it and preserve it" (Plato).

"I believe that the Good Lord gave us a finite number of heartbeats and I'm damned if I'm going to use up mine running up and down a street" (Neil Armstrong on jogging, in an interview with Walter Cronkite).

In this second of a two-part theme issue on the emerging discipline of sports cardiology we consider the scientific data that are now helping us make informed decisions regarding health promotion, exercise training, and management of established cardiovascular disease. The recent tragic death of Canaccord CEO Paul Reynolds following a triathlon in Hawaii serves as a reminder that early detection and treatment of occult cardiovascular disease has the potential to save lives—but is the cost within a range that is acceptable to society? In the first article, Ms Barbara Morrison and colleagues delve into the controversial subject of cardiovascular pre-participation screening and risk assessment in masters athletes. They consider evidence regarding the various screening options and some possible risk-mitigating strategies. In the second article, Dr Andrea Lee and colleagues explore the impact of excessive endurance exercise and show that there is some truth behind Neil Armstrong's concern that too much exercise may be harmful to the heart. The authors consider the body of evidence suggesting that excessive endurance exercise can cause cardiovascular problems, including atrial fibrillation, right ventricular dysfunction, ventricular arrhythmias, and coronary artery disease. In the third article, Dr Darren Warburton and colleagues review the risk-benefit paradox of exercise, and the clear evidence regarding the cardioprotective effects of regular moderate exercise. They note that levels of physical activity far less than currently advocated in national guidelines can lead to clinically relevant improvements in health status.

The authors who have contributed to this theme issue are all affiliated with SportsCardiologyBC, a multicentre initiative for clinical assessments, research, advocacy, and education. Kudos to those who have contributed to the clinic's success so far!

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This article has been peer reviewed.