Editorial

Physical activity, a lasting legacy from the 2012 Olympics and Paralympics

What is your dose?

The world’s sporting eyes will be turned towards London in July 2012 for the Olympic Games. The opening ceremony on 27 July will mark the culmination of an enormous amount of hard work since London was announced as the host city in July 2005. London, lest we forget, was awarded the 30th Summer Games on the back of its commitment to a lasting health and social legacy. It therefore seems opportune to reflect on how the Olympics might have an impact on rheumatology, and perhaps of more relevance, how the rheumatology community can aspire to contribute to the Olympic legacy.

UK rheumatology will contribute to the Games in a variety of ways. Some of our clinical colleagues are working as members of Team GB or the various national governing bodies. Current approaches to managing inflammatory arthritis enable patients to achieve and maintain high functional performance. Some of our patients may well be competing at the Olympic or Paralympic Games, requiring support from their clinical rheumatology teams. I am sure some of our colleagues and patients will have offered their time as one of 70,000 London Organising Committee of the Olympic Games and Paralympic Games volunteers, and there will be many more who are spectators at the 37 competition venues. The majority, however, will follow 14,700 of the world’s sporting elite competing for the coveted gold medal through television, radio and the Internet. The 2012 Olympics and Paralympics will see unprecedented live coverage, with the BBC alone presenting 340 h of live feed every day (yes, that is the equivalent of 14 days of live feed across its digital TV and Internet channels every day). Whether you love or hate sport, it is going to be almost impossible to escape the Olympics, and therein lies the most important legacy opportunity, to promote the benefits of physical activity.

Low cardiorespiratory fitness (CRF) is probably the world’s most important non-communicable disease public health risk factor. The importance of low CRF cannot be overstated and when considered alongside other all-cause mortality risk factors is of greater importance than the combined risks of smoking, obesity and diabetes [1]. If you can spare 7 min, I recommend you watch a video clip by Dr Mike Evans, founder of the Health Design Lab (http://www.youtube.com/watch?v=aUaInS6HIGo&feature=share).

Rheumatologists are already well aware of the impact that cardiovascular disease has on our patients’ well-being [2], which is reflected in the considerable efforts that we go to in collaboration with general practitioner colleagues to ensure that our patients’ lipid profile is optimized, obesity addressed, hypertension appropriately managed and smoking cessation advice and support offered. Such primary and secondary health care prevention is admirable and to be applauded, but perhaps should be seen in the context that addressing these individual risk factors will not yield the public health benefits of improving CRF through the promotion of increased physical activity.

While patients with inflammatory arthritis are known to be less physically active than the general population, relatively little is known about the quality of physical activity advice offered by rheumatology teams. The perception among some patients is that rheumatology health professionals may lack the expertise to confidently prescribe exercise [3]. An audit in our own department has revealed that more than 90% of our patients were aware of the benefits of regular physical activity, 95% perceived regular exercise to be safe but <50% had received information on exercise and physical activity.

That is not to say that rheumatology teams do not promote physical activity as part of general health advice, but I doubt whether the investment and resources given to promoting physical activity and the prescription of exercise is comparable with that given to lowering cholesterol, smoking cessation, bariatric medical and surgical treatments and managing hypertension. Unfortunately the cure for low CRF is not (yet; http://news.bbc.co.uk/1/hi/health/7535770.stm) a drug and has not received the kind of investment associated with the pharmaceutical industry’s development and promotion of a new product. It is worth considering that during 2010, Pfizer generated more than $11 billion of sales from its lipid-lowering drug Lipitor.

The importance of physical activity is not confined to our patients. The rheumatology community is aware of Dame Carol Black’s work in promoting well-being at work [4], and central to that philosophy is the promotion of physical activity by employers and the provision of opportunities for employees to be physically active. I am sure there is not a rheumatology team in the UK that has not been asked to justify its spending on biologic therapies against the appropriate National Institute for Health and Clinical Excellence (NICE) guidance, yet I wonder how many departments work in trusts that provide well-being programmes and apply and monitor the NICE guidance on promoting physical activity in the workplace [5]. The
importance of employee well-being is of great interest to
the top multi-nationals who invest heavily in well-being
programmes and realize a significant return on that
investment through reduced absenteeism, increased
presenteeism, improved productivity and enhanced
recruitment and retention [6].

Some of you will be reading this with a degree of
complacency as individuals who achieve the recom-
meded 30 min of moderately vigorous physical activity
five times a week [7], so I will close by bringing to your
attention the evidence that suggests that prolonged in-
activity is a significant contributor to all-cause mortality
[8, 9]. In essence, if you are active for 30 min of the day
but then spend the remaining 23.5 h being sedentary
through sleep, commuting, working at your desk,
commuting and then reclining in front of your flat screen
computer or TV, you risk significantly undermining the
physiological benefits of your 30 min of exercise. Put an-
other way, if I offered you a tablet that had no risk factors
and that had proven benefits for reducing heart disease,
istroke, cancer, diabetes and Alzheimer’s, and then told
you that the recommended dose was one tablet five
times a week but that you would gain even more benefit
by taking extra tablets without risk, what dose would you
take?

The London 2012 Olympic and Paralympic Games pro-
vide the opportunity to focus a nation’s mind on physical
activity, so let us use that opportunity to improve the
well-being of ourselves and our patients by making a sus-
tainable commitment to increase levels of CRF through
physical activity and thereby help achieve a real Olympic
legacy.

Disclosure statement: The author has declared no
conflicts of interest.

Simon Till1

1Department of Rheumatology, Royal Hallamshire Hospital,
Sheffield, UK.

Accepted 13 April 2012

Correspondence to: Simon Till, Department of Rheumatology,
Royal Hallamshire Hospital, Sheffield S10 2JF, UK.

E-mail: s.h.till@sheffield.ac.uk

References

1 Blair SN. Physical inactivity: the biggest public health
1–2.

2 Myasoedova E, Gabriel SE. Cardiovascular disease in
rheumatoid arthritis: a step forward. Curr Opin Rheum

3 Law R, Breslin A, Oliver E et al. Perceptions of the effects
of exercise on joint health in rheumatoid arthritis patients.

4 Working for a healthier tomorrow. A report from Dame
Carol Black. http://www.dwp.gov.uk/docs/hwwb-
working-for-a-healthier-tomorrow.pdf (29 April 2012,
date last accessed).

5 Workplace health promotion: how to encourage
employees to be physically active. National Institute for
Health and Clinical Excellence public health guidance
PH013 (2008), http://www.nice.org.uk/nicemedia/
live/11981/40672/40672.pdf (29 April 2012, date last
accessed).

6 Department of Workforce Pensions. Building a case
for wellness. A report by PriceWaterhouseCoopers 2008,
http://www.dwp.gov.uk/docs/hwwb-dwp-wellness-
report-public.pdf (29 April 2012, date last accessed).

7 Department of Health. Start active, stay active: a report on
physical activity from the four home counties. Chief
consum_dh/groups/dh_digitalassets/documents/
digitalasset/dh_128210.pdf (29 April 2012, date last
accessed).

8 Ekblom-Bak E, Hellenius M, Ekblom B. Are we facing a
new paradigm of inactivity physiology? Br J Sports Med

9 Hu FB, Leitzmann MF, Stampfer MJ et al. Physical activity
and television watching in relation to risk for type 2 dia-