

# Pharmacy at the Olympics: promoting the profession to schoolchildren

David G. Allison and Sally Freeman describe how the University of Manchester is introducing educationally and socioeconomically deprived schoolchildren to pharmacy

THE forthcoming London 2012 Olympic and Paralympic Games provides a great opportunity for Britain to showcase not only its sporting talents and facilities, but also a range of support services that would normally go unobserved by the general public at such events. Top of this list would be the volunteer support of approximately 130 pharmacists and pharmacy technicians, who will be responsible for the operation of the pharmacies at each of the nine Olympic venues and the three purpose-built polyclinics. In addition to providing conventional pharmacy support, pharmacists will also be involved in developing a special Olympic formulary and providing a wealth of expert advice on diet, health promotion and over-the-counter medicines use.

## The world of pharmacy

To demonstrate how pharmacists will help care for thousands of athletes from across the globe and to advertise the more applied side of pharmacy, the Manchester School of Pharmacy hosted interactive workshops entitled "Pharmacy at the Olympics" at the recent National Science and Engineering Week (NSEW) (13–15 March 2012) event in Manchester. The workshop, staffed primarily by four final-year MPharm students, was set in a widening participation context to encourage educationally and socioeconomically deprived primary and secondary schoolchildren in Greater Manchester to engage with higher education, as well as introducing pharmacy as a potential and exciting career choice.

Before the NSEW, the workshop was trialled at University of Manchester primary higher education awareness days and at a local high school careers fair. The activities that were included in the workshop were based on the appropriate key stage curriculum and were designed to be both fun and informative and to encourage young learners to consider pharmacy as a viable career option. Each of

the activities was interactive, with a particular pharmacy focus but with a clear Olympic theme running throughout.

## Activities

### Blood station

One activity involved a blood station, the focus of which was to learn about the cells that make up the blood and how muscles are supplied with the oxygen needed to produce the energy required for sport. Bottles of "blood", representative of the volume of blood in a human, were on display. Light microscopy was used to view red and white blood cells and molecular modelling kits along with YouTube clips on an iPad were used to illustrate how haemoglobin carries oxygen. Discussions with some of the older children centred on blood doping.

### Mock pharmacy

A portable mock pharmacy was constructed, where pupils learnt about the importance of safely prescribing the correct medicine, at the correct dose, by the right route to the correct patient. Pupils were invited to wear white lab coats and to act as "pharmacists" by checking a prescription for a famous athlete and then to select the appropriate (dummy) product from the shelves of the "pharmacy". Information sheets about the various medicines and common ailments experienced by athletes were available for use. Through the use of iPads (to search the Global DRO UK website) and dummy products, information about banned substances found in common pharmacy products was discussed in relation supply of OTC medicines.

### Nutrition station

A nutrition station was used to illustrate the importance of a healthy and balanced diet as a means of contributing to a patient's management of existing conditions or prevention of further complications of a disease. In addition, diet comparisons were made between a range of different athletes competing in different sports such as sprint athletics, weightlifting and cycling. Importantly, the "five-a-day" message was reinforced.

### Ancient Greek pharmacy

Over the course of the three-day event 779 pupils in years 7–9 attended the fair. In addition, a half-day session for primary school children was held, where pharmacy put on a special exhibition of ancient Greek pharmacy versus modern pharmacy. Here, ancient



Final-year pharmacy students from the School of Pharmacy, University of Manchester, promote pharmacy at the National Science and Engineering Week

Greek remedies were compared with modern day pharmaceutical practices and treatment of Olympic athletes. Pestles, mortars, dried herbs, chariot-injuries and togas added to the fun. In addition to participating in the activities, young learners from both age groups were informed about the academic requirements for pharmacy and strongly encouraged to continue working hard at school and to study science.

## Final thoughts

Our belief at the outset was that a child's experiences of education at school can have a significant impact on their future development. Overall, the pharmacy demonstration was deemed an overwhelming success by teachers and pupils alike, with many young learners leaving with an enlightened and positive view of pharmacy. By couching our activities in an Olympic theme, we hope that we will have introduced pharmacy to a much wider audience than through conventional, literature-based approaches.

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