

PODIATRIC SPORTS MEDICINE

Prof Nat Padhiar

Motto: *Inspiring Clinical Excellence through Science & Innovation, thinking beyond Biomechanics*

Ethos: Collegiate

LOGO



Physical activity and sports participation have been on the increase over the last 4 decades¹. Physical activities include walking or cycling for everyday journeys, active play, work-related activity, and active recreation such as working out in a gym, dancing, gardening, or competitive sport¹. It is estimated that each year approximately 1.5 million people attend accident and emergency (A&E) departments in Britain² and 3.7 million people present to emergency departments in the USA³ with an injury related to sport and exercise. Most of the injuries were soft tissue (70%) and the lower limb was involved in 141 (60%) of the cases and 88 of these were related to the foot and ankle.

Podiatric Sports Medicine

Podiatric Sports Medicine (PSM) as a formal specialty within the Podiatry profession, is relatively new and still in its infancy. Historically, clinicians have referred to themselves as 'Sports Podiatrists' due to their association with sportsmen as their patient group but have had no formal qualification or training in PSM. The London 2012 Games acted as a catalyst for an idea that was floating around for many years, to set up a specialism in PSM within our profession. I was fortunate enough to be a member of the Medical Services of LOCOG 2012 and learned a lot from colleagues from multi-disciplinary specialties. I was also the clinical lead for Podiatry and had a team, comprising 4 Podiatric Surgeons and 12 Podiatrists of varying experiences who took part as volunteers (Figure.1.) and delivered excellent care for the athletes during the London 2012 Olympic & Paralympic Games. The question was repeatedly asked whether PSM as a specialty existed in the UK. It became very clear that in order to provide podiatry care at this level, there was a great need to establish a specialism and specialty in this field. Sports Medicine in the UK exists as a specialty in Medicine and an academic qualification in Sports & Exercise Medicine (SEM) has been offered for the last 4 decades. In order to identify and differentiate from SEM which is primarily practised by medical doctors; Sports Medicine practised by a podiatrist has been termed Podiatric Sports Medicine in order to have our own identity.

There was a 10-year plan to establish PSM as a specialty and, there are 5 facets to this plan. (1) Defining the Scope of Practice. (2) Post-graduate education which is specific to podiatrists who want to pursue a career in PSM. (3) Set up a Specialist Advisory Group (SAG) within the Royal College of Podiatry. (4) Annual Conference. (5) Employment with NHS and Private sector.

(1) Scope of Practice

This includes the management of common and uncommon musculoskeletal foot, ankle, and leg disorders (Fig.1.) encountered in sports as well as within an active population. The main skill and expertise required to make a diagnosis & differential diagnosis are based on the knowledge of the conditions, knowledge of anatomy, good history taking, clinical examination, ability to request and interpret various investigations and then having a structured plan of management. Justification is based on the evidence thus encouraging evidence-based practice.

The decision-making process is also an important part of the scope, especially at the elite and professional end of the sports spectrum.

(2) Qualification in Podiatric Sports Medicine

There now exists a Post-Graduate Diploma and an MSc in PSM offered by the Centre for Sports & Exercise Medicine, Queen Mary, University of London. This is the first academic course offered to podiatrists in the UK & Ireland. The delivery, since the pandemic, is a hybrid with a mixture of online lectures, face 2 face workshops/demonstrations, and both virtual and actual clinical attendance. There are 9 level M modules (270 hours).

<https://www.qmul.ac.uk/postgraduate/taught/coursefinder/courses/podiatric-sports-medicine-msc/>

Podiatric Sports Medicine remains popular with most graduates as it poses a diagnostic challenge and, treatments that are rewarding and very gratifying.

Vasyli-College of Podiatry Award is available to prospective students to cover some of the cost of the course fee only. <https://www.qmul.ac.uk/scholarships/items/podiatric-sports-medicine-scholarship.html>

(3) Specialist Advisory Group, Royal College of Podiatry

PSM at present exists as a Specialist Advisory Group (SAG) within the Royal College of Podiatry (RCoP) with a plan to in the future to establish a Faculty of PSM with Fellowship and Membership examination which reflects the scope of practice.

The Faculty of Podiatric Medicine, Royal College of Physicians & Surgeons of Glasgow (RCPSG), at present also offer either an Associate Member or Member, status to eligible PSM graduates.

(4) Podiatric Sports Medicine Annual Conference

This is a valuable part of the specialty and all members involved in the musculoskeletal care of patients will benefit. This is a two-day conference that includes lectures, workshops, and informal discussions delivered by experts from across Europe and the world. The first conference was organised in London in 2012 to coincide with the London Games and this year we celebrate the 10th Anniversary at the annual PSM conference to be held at The Royal College of Physicians & Surgeons of Glasgow.

For more information contact patrick.thornton@aesculap-academy.com

(5) Employment prospects in PSM

At present, most jobs in PSM are likely to be in the private sector and mostly created by clinicians themselves. There are no formal jobs within the NHS in PSM, but discussions are taking place with

Podiatric Surgery departments to create a tiered care by employing PSM podiatrists. Similar discussion is taking place with Primary Care Network.

Conclusion

The foundation stone is laid and even though PSM is still in its infancy and many challenges ahead, the 10-year plan is working. At present nearly 55 podiatrists have graduated with PSM qualifications, and it has had an appreciable impact on changing careers and practices for several colleagues. The academic curriculum of PSM@QMUL, has a clinical element based on evidence, which should be beneficial to all podiatrists thus enhancing their scope of practice and provision of benefits to their patients. Within sports, it is invaluable.

For further information contact Prof Nat Padhiar n.padhiar@qmul.ac.uk

References

- (1) Department of Health (2011). Start Active, Stay Active: A report on physical activity for health from the four home countries Chief Medical Officers.
- (2) Nicholl JP, Coleman P, Williams BT. Pilot study of the epidemiology of sports injuries and exercise-related morbidity. Br J Sports Med.1991;25:61–6.
- (3) Burt CW, Overpeck MD. Emergency visits for sports related injuries. Ann Emerg Med.2001;37:301–8.



Figure.1. Podiatry team at the London 2012 Olympic & Paralympic Games.

From left to right – Kelly Ma, Dowlina de Ronde, Nat Padhiar, Anne-Marie O'Connor, Ron McCulloch, Nick Knight, Trevor Prior, Suzy Spiers, Sophie Roberts, Ian Griffiths, Katriona Macklin, Sonja Cimelli, Nicola Wilson, Sandra O'Malley, Stephanie Benjamin, and Simon Otter.

FOREFOOT: Plantar bursitis, Morton's neuroma, Metatarsal stress fracture, Plantar plate tear, Freiberg's infraction (avascular necrosis of metatarsal head), Sesamoiditis, Sesamoid stress fracture, Hallux Rigidus/valgus (bunion)/limitus, Tailor's bunion, Metatarsal and Phalangeal fractures Ingrown toenail and osteoarthritis of joints.

MIDFOOT: Lisfranc disruption, Stress fracture of the navicular, Crisp-Padhiar Syndrome (Os naviculare syndrome), Tibialis anterior and posterior enthesopathy, Midfoot osteoarthritis, Cuboid compression syndrome, avulsion fracture of the styloid, 5th metatarsal base fractures, Osteoarthritis and Stress fracture of the metatarsal base.

HINDFOOT: Plantar fasciitis, Partial tear of plantar fasciitis, Stress fracture of the calcaneum, Flexor hallucis longus tendinopathy, Tibialis posterior tendinopathy, Tarsal tunnel syndrome, Medial calcaneal nerve entrapment, Deltoid ligament strain/partial tear, Medial malleolus stress fracture, OCD of the talus, Anterior impingement syndrome, Posterior impingement syndrome, Sinus tarsi syndrome, Lateral ligament strain/tear/laxity, Peroneal tendinopathy, Peroneal tendon subluxation, and Lateral malleolus stress fracture.

ACHILLES: Haglund's deformity, Classical mid-portion Achilles tendinopathy (AT), Insertional AT, Musculo-tendon AT, Intra-substance tendon tears, Achille tendon ruptures.

EXERCISE INDUCED LEG PAIN (EILP): Stress fracture of tibia/fibula, Medial Tibial Stress Syndrome (MTSS), Chronic Exertional Compartment Syndrome (CECS), Superficial Peroneal Entrapment Syndrome (SPNES), Radiculopathy, Muscle hernia, Myopathy, and Anterior tibial muscle syndrome.

Figure.2. Common foot, ankle & leg conditions encountered by Podiatrists.