

## **The profession of Podiatry – The Staffordshire Malta link**

*Mr. David Dunning*

### **Historical perspective**

Frederick Wood Jones an eminent surgeon and thinker of the middle of the last century stated that *“Man’s foot.....is the most distinctly human part of the whole of his anatomical make up....”* The foot is the main organ of locomotion and as such it is a very specialised structure. It contains 26 bones, 30 plus joints, 107 ligaments and 19 muscles. Not only is it flesh and blood, sited as far away from nourishment as possible, but it is also a sophisticated system of levers and pullies giving it a mechanical role way beyond any other part of the human body. Leonardo DaVinci (1452-1519) showed a clear understanding of this when said that *“The foot is the most marvellous of machines – and a work of art”*.

The history of foot care dates back as far as walking upright. The tomb of Ankhmorh in Egypt, known as the physicians tomb, dating back 4,400 years depicts him giving close attention to a patients foot. Socrates is attributed with the saying *“to him whose feet hurt everything hurts”* and his contemporary Hippocrates, he of the hippocratic oath, is also well known for his work on Tyaloma and Talipes. A French surgeon, Rousselot, wrote the first book on the treatment of foot conditions in 1755 *“Menoire sur les cors des pieds”* establishing the profession of podiatry as a branch of surgery. It took until 1854 for the first professional association to be instigated under the direction of Lewis Durlacher with nationally recognised societies appearing later in New York in 1895 and in Britain in 1912.

### **Podiatry now**

Modern podiatry now has many facets. It is a highly technical and demanding profession. Podiatry is one of the few professions in and around medicine that have independence of diagnosis. Podiatrists are expected to make their own clinical decisions. Also, there are well established clinical specialisms within the profession for example in surgery, wound care, rheumatology and biomechanics. Podiatrists in the English speaking world are required to have successfully completed a Bachelor of Science level degree before they can practice though this is not yet the European standard. I am happy to say that Malta has adopted this bench mark. Not only offering a well researched and comprehensive four year course at undergraduate level but also a parallel conversion course for diplomats in podiatry. This puts Malta in the fore front of European countries in terms of education in foot health matters.

Perhaps one of the areas that podiatry can play a vital role is in the treatment and prevention of foot problems in diabetes. Malta has a disproportionate number of diabetics and this is an area where there is much evidence that the use of podiatry skills reduces the incidence of foot problems and treatment times. The St. Vincent declaration (1989) provides for greater emphasis on foot care world wide. Armstrong D.L. and Lavery L.L. (1998) writing in the journal *The American Family Physician* reinforced this by stating that *“Careful inspection (and treatment) of the diabetic foot on a regular basis is one of the easiest, least expensive and most effective measures for preventing foot complications”* No only do these complications greatly disrupt

normal lifestyle and they have massive financial implications for both the patient and the health care provider. A situation recognised by the National Health Service of Great Britain in the National Service Framework compiled in 2002 to develop and target the skills of all clinical staff. It strongly recommended the annual screening of diabetic patients' feet, which it said "... is considered key to the prevention of long term foot problems..."

The destructive nature of Rheumatoid arthritis that results in joint deformation and deterioration also illustrates the value of podiatric practice. The traditional skills are invaluable in lessening the affects of the consequential increased pressure on delicate structures of the foot whilst the use off advanced techniques in foot orthoses and footwear are becoming more valuable in controlling the rheumatoid foot. Thus helping to keep the patient mobile and pain free allowing them to lead an active and productive life (Korda J, Balint G.P. 2004).

### **Podiatry tomorrow**

Underpinning podiatric practice is a firm knowledge of biomechanics and gait. The foot is the "base plate" of all activity. The study of the kinetics and kinematics of human movement provides the podiatrist with a understanding of the forces acting on the body and an ability to change them. This is podiatric biomechanics. Most of the treatment and management pathways used by podiatrists are based on altering foot and lower leg mechanics. The study of kinetics and kinematics is fundamental in the assessment of lower limb injury and disease. Assessment and treatment clinics full of technically advanced equipment need highly trained and motivated clinicians to utilise them to the full.

Staffordshire University is the host to the first Masters degree on the subject of Clinical podiatric Biomechanics. It was set up in 2001 and was quickly followed by a Post Graduate Certificate in Musculo-skeletal Diagnosis and latterly a Post Graduate Certificate in Footwear in Diagnosis and Therapy. The whole programme has now had over 240 participants. The University gait lab is well known for its high level of equipment and the research it produces under the guidance of Dr Nachiappan Chockalingam.

Staffordshire University is a community based university that has close links with the community it serves. There are over 160 podiatrists working within a thirty mile radius of the University serving a population of over 1.1 million people. This equates to over 250,000 contacts per year. The team are mainly clinical podiatrists working within the local podiatry departments and have access to a high level of clinical expertise. Podiatrists in the area are heavily involved in nearly all departments of health care with many staff trained at master's level. As a result of these strong local links the Staffordshire University has a pool of clinical expertise, including visiting professors, fellows and lecturers. The University has run an innovative and successful Continuing Professional Development (CPD) programme locally for the last two years.

### **Links**

Already staff from both Universities have exchanged visits. Lecturers from Staffordshire have delivered modules on the BSc course and there are plans for this to continue. Suggestions for joint validation of a Masters Degree and CPD programmes and for opportunities at PhD level

are also being pursued. There is also the possibility of several forms of research collaboration to be considered.

In July this year eight Maltese podiatry students will visit Staffordshire to experience the practice of podiatry in all its forms in the UK setting. Thanks to the good will of South Staffordshire PCT, Salts Healthcare and the University itself these students will have a day in a gait lab, visit an orthoses and surgical footwear manufacturer, be present during foot surgery theatre sessions and observe “normal” podiatry clinics both in NHS and private practice.

I hope that all this will be the start of a long and fruitful relationship between the two institutions.

**References:**

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