Diabetes is a chronic disease which is greatly underestimated and often undetected, particularly in certain counties. It is responsible for limb and foot amputation, neuropathy, arterial diseases and kidney failure. Diabetic foot problems are among the most serious and costly complications of diabetes, with lower limb amputations performed as a result of the disease.

The need for accurate foot risk stratification for patients with diabetes and access to foot clinics is high on the agenda for the Scottish Government and the NHS. The Scottish Diabetes Foot Action Group, supported by the NHS, the Scottish Government and Diabetes UK, has launched a new ‘CPR (Check, Protect, Refer) for Feet’ campaign, which encourages ward staff to check the feet of patients with diabetes admitted to hospital.

Glasgow Caledonian University is unique in its research work in the field of diabetes and is leading efforts to tackle the rising problem of diabetes and in particular diabetic foot disease. Complications of diabetes include diabetic neuropathy, which can ultimately lead to ulceration and amputation of the toes, feet and lower limbs. Diabetic neuropathy is one of the most common of the long-term complications of diabetes, which could be affecting a good percentage up to 50% of patients. Loss of feeling is a particular risk because it can allow foot injuries to escape notice and treatment.
Glasgow Caledonian University's Professor of Podiatry Stuart Baird and Christine Skinner are pioneering education and training programmes in the UK, the Middle East, India and Far East and campaigning for greater awareness of the serious effects of the illness. The Middle East and North Africa accounts for 6 of the top 10 countries by diabetes prevalence.

Professor Baird presented a Workshop on Diabetic Foot and Painful Neuropathy at the 1st American Diabetes Association Middle East Congress on Diabetes Prevention and Treatment in Dubai. The programme was delivered to primary care physicians, surgeons, podiatrists and nurses to provide knowledge and skills of the pathogenesis and long term management of painful diabetic neuropathy; establish the required skills to early predict peripheral nerve injury; and identify the skills for improving diabetic foot care for application to clinical practice.

Professor Baird’s expertise in this area has led to work with Pfizer, one of the largest research-based pharmaceutical companies in the world. Pfizer provides medicines for many common illnesses, such as cardiovascular disease and diabetes, and for rarer conditions, such as types of cancer that afflict only small numbers of people. The organisation aims to work with the medical community on extensive disease awareness and patient information programmes.

Supported by Pfizer, Professor Baird is delivering workshops on the early identification of risk of diabetic foot disease in Abu Dhabi, Kuwait and Dubai to an audience of physicians and surgeons. The GCU expert team has also worked closely with Novo Nordisk, a global healthcare company with years of innovation and leadership in diabetes care. Professor Baird delivered workshops for GPs and practice nurses in areas which had no screening programmes.

In 1997, Professor Baird and Ms Skinner established their first overseas programme in diabetic foot management in Malaysia, teaching doctors and nurses how to undertake screening and simple patient assessment, categorise patients according to risk, and carry out routine diabetic foot management. Their interest in education research and Diabetic Foot Disease means they have delivered programmes annually at the Pan Arab Conference on Diabetes since 2002, and their work has also won recognition from the World Health Organisation (WHO), which invited them to review diabetic foot provision in Oman. This resulted in training programmes for vascular and orthopaedic surgeons being delivered in Oman over the last seven years.

Professor Baird successfully won a Scottish Government Innovation grant from the South Asia Development Fund. This grant was delivered in India during 2010/2011 to an audience of 350 Indian physicians and surgeons from Chennai, Mumbai and Delhi to access the most up to date techniques in the field of diabetic foot assessment.

Internationally, GCU’s work in this field is vital as in many developing countries there is no early intervention and the patient’s foot is never assessed, leading to below-the-knee amputation and potentially death. Professor Stuart Baird and Christine Skinner are actively involved as practicing podiatrists within the multidisciplinary team at the Diabetic Foot Clinic, Centre for Diabetes and Metabolism, Southern General Hospital. Additional research activities include the effects of adipokines in wound healing applications, the action of urea cream in improving hydration levels on anhydrotic skin associated with diabetes, the assessment of small muscle atrophy in the foot associated with motor neuropathy as a consequence of diabetes, and international study to evaluate the learning outcomes associated with undergraduate podiatric education in other countries.

At Glasgow Caledonian University, we work with industry and public sector partners to ensure our expertise responds to the need for real-world innovation. GCU’s strategic business development and knowledge transfer teams work with academic experts in our Schools and Research Institutes to support businesses with a problem-solving approach.

Contact us to find out more about building a brighter future with GCU at www.gcu.ac.uk/business.