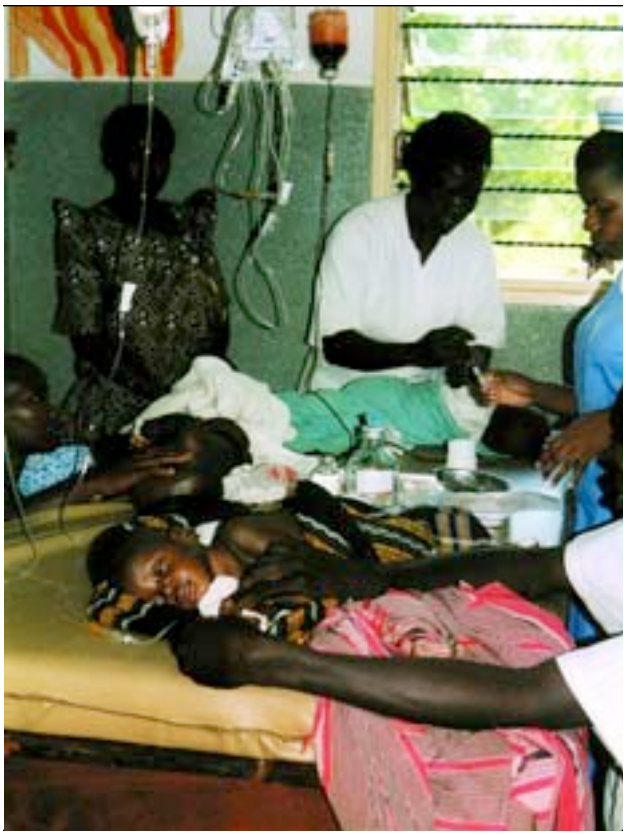
Medical work in the developing world: an opportunity

Rosie Conlon, Ultrasound Lecturer, School of Healthcare Studies, University of Leeds, explains her work establishing medical ultrasound training programmes in Africa.

Introduction

Global health has moved higher up the political agenda as governments become more aware that poverty reduction is the key to health and development. Internationally there is an agreed target to halve the number of people living in extreme poverty by the year 2015.[1] The health of infants and children is a good barometer for overall population health,and the poorest 20% of the world's population are roughly 10 times more likely to die before the age of 14 than the richest 20%.[2] Maternal mortality also vividly illustrates the health divide between the rich and the poor, and in much of Africa the risk of dying in pregnancy is 1 in 12, compared to 1 in 4000 in Europe.[3] However, as healthcare practitioners, we can help to break the vicious circle of poverty and ill health.

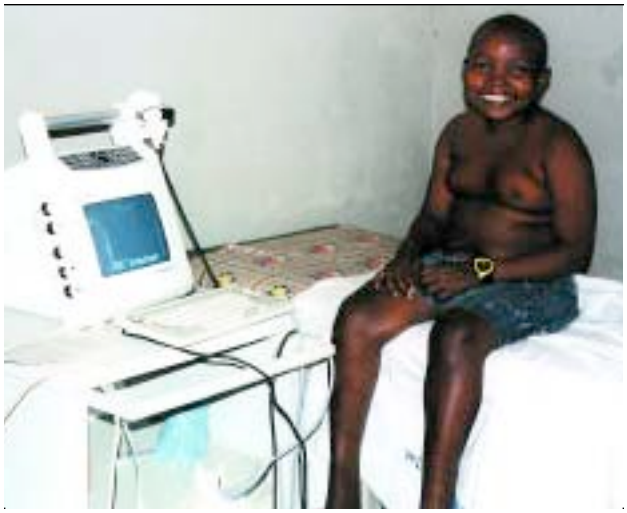


Infants presenting with severe anaemia as a result of malaria.

The work

Over the past eight years I have been fortunate enough to be involved, on a voluntary basis, in establishing medical ultrasound training programmes in Africa. The most recent project I have been co-ordinating has been on behalf of, and sponsored by, the British Medical Ultrasound Society. Thanks to the generosity and the support of the Ultrasound Manufacturers Association in the UK,a suitable piece of ultrasound equipment was donated and transported to a rural hospital in Uganda where a formal ongoing ultrasound training programme has been established for volunteers from a variety of disciplines within the hospital.

Provision of a diagnostic imaging service, where previously there was only a very basic x-ray facility providing skeletal radiography, has had an extremely positive impact on patient management. Ultrasound can prevent unnecessary surgery, for example, by reducing the number of laporotomies required,thus allowing more conservative management where appropriate. This has a positive effect on an establishment in which the operating facilities are far from adequate,and infection and mortality rates are high.



A young boy with Cushing's syndrome, waiting for an ultrasound examination in a rural African hospital.

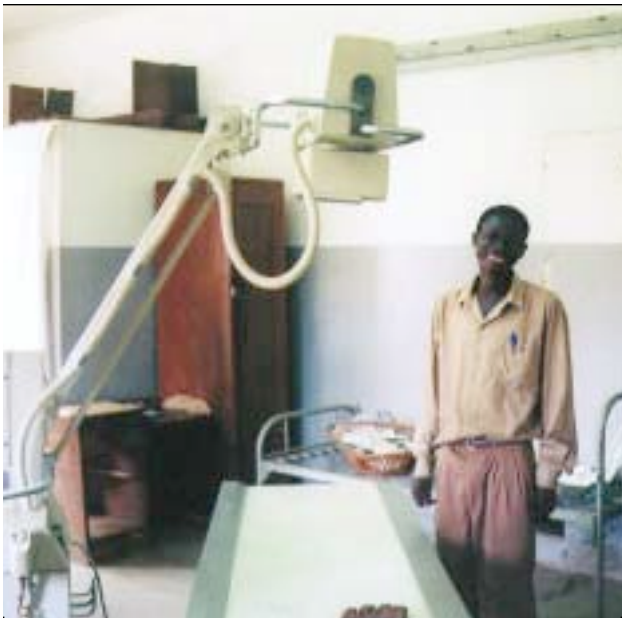
The service also allows the management of patients to be planned more appropriately, as those that need surgical intervention can be prioritised accordingly. With appropriate support equipment and care, an ultrasound service is relatively low maintenance, robust and inexpensive. For the hospital staff involved it has been a welcome opportunity for continuing medical education (CME),and for hospital management it can be seen as an additional source of income once the service is established. For the patients, the time from presentation to diagnosis and discharge is often reduced. This is an important factor in populations already stricken by poverty, particularly as relatives or carers have to stay with the in-patients,a necessity that removes them from other family members and duties for subsistence.

Ultrasound is an operator-dependent technique and adequate training to a level of competence is essential. Development of a long term link with the other sites involved is crucial, and a possible way of achieving this would be via internet access and a telemedicine link. Difficult cases could then be referred electronically to the UK and the appropriate advice sought. The internet would also open up a world of CME for the hospital staff.

At all of the hospital establishments I have visited in Africa, the queue for x-ray is always long and the equipment,although

robust,is aged and at many sites operated by lay radiographers. X-ray facilities in rural hospitals are often the only diagnostic imaging service provided and are always in great demand. Therefore,the potential for improvement is huge.

An x-ray waiting area in a rural hospital in Uganda.

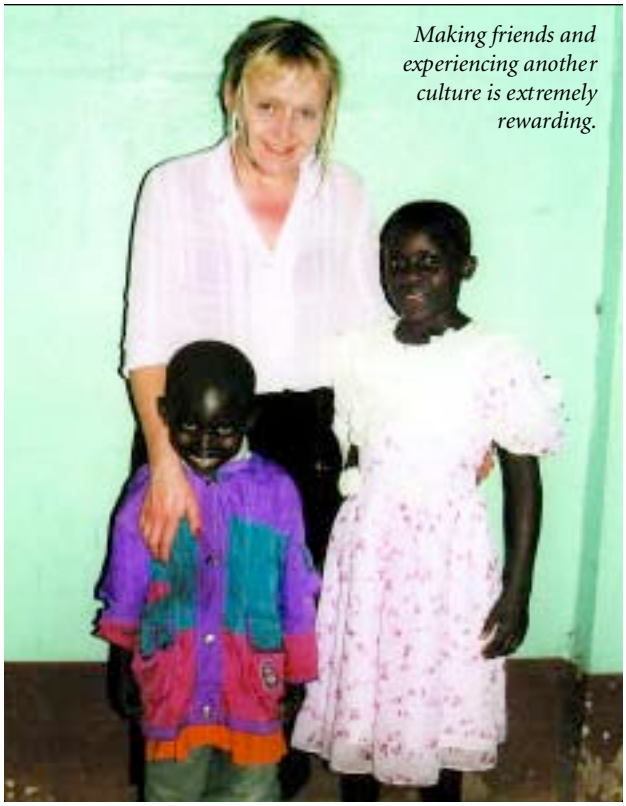


The x-ray equipment is in great demand.

The rewards

Health professionals who work overseas frequently find that they develop skills that are invaluable on their return to the NHS. These skills include training, teaching and human resource development, prioritising and allocating scarce resources, multidisciplinary teamwork and leadership and managing change. Individuals have also highlighted the educational value of encountering pathologies and disease processes not witnessed before.

On a personal level I have always found the ability of the overseas hospital staff to smile in the face of adversity extremely refreshing, particularly when one considers the current climate within the NHS. A small notice in one large rural hospital that currently has no running water supply read: 'We seldom think of what we have but always of what we lack, this tendency has caused more suffering than all the disease and illness in life'.[4] On another level, the opportunity to experience a different culture and to see a beautiful part of the world,as well as make wonderful friends,is one that should not be missed.



Making friends and experiencing another culture is extremely rewarding.

Overseas working initiatives

Staff at Leeds Teaching Hospitals Trust are committed to sharing their skills and expertise with the developing world. The trust is the largest in the UK, employing nearly 15,000 people. This is in stark contrast to much of the rest of the world, some of which has very limited access to healthcare. In Bangladesh, for example, there are only 10,000 doctors for 130 million people, and in rural areas of Uganda the doctor/patient ratio is 1:25,000, with only one pathologist for a country the size of England and Scotland. The reality is that most people do not receive even the most basic of healthcare.

Whilst the NHS is not designed to provide care beyond the UK, skilled employees are willing to give up their own time in order to help poorer nations. As mentioned previously, health professionals who work in developing countries return to the NHS with new skills and perspectives which are of great benefit both to the individual and to healthcare in the UK. For this reason, the Leeds Teaching Hospitals Trust Board has approved, and supports, an initiative that seeks to link the trust with a small number of healthcare providers in the developing world. This project is known as OPT IN (Overseas Partnership and Training Initiative). Already the project has established links in Bangladesh, Guyana in South America, and two rural hospitals in Uganda.

Many people want the chance to make a difference and overseas work experience offers unparalleled opportunities for professional development, enabling staff to enhance their skills. While real progress can only be made by complex organisational and political changes,it is still possible for small agencies to make a difference. This is particularly so if projects network with other groups, aim for sustainable change, and focus on empowering and training.

◆ **THET (the Tropical Health and Education Trust)**

THET is a registered charity and has years of experience in

developing links and partnerships with health organisations within Africa. THET has entered into a partnership with OPT IN, to form a mutually beneficial alliance which strengthens both organisations.

THET works with hospitals, medical schools and other healthcare training institutions in poorer tropical countries, helping them to achieve their goals. This is done mainly by linking them with similar organisations in the UK, so that skills and knowledge are shared and staff are trained to meet locally identified needs that previously they were unable to fulfil.

◆ OPT IN

The main aims of OPT IN are:

1. To link with a small number of overseas governmental and non-governmental organisations (NGO) in defined nations with specific needs. At present these are the Georgetown Public Hospital in Guyana; the Centre for Rehabilitation of the Paralysed in Dhaka, Bangladesh; and Kamuli and Kumi, two rural NGO hospitals in Uganda.
2. To design projects that result in sustained benefit and which focus on training, and sharing the skills and experience of NHS staff. In Guyana, training is provided in A&E, rehabilitation medicine and endoscopy. In Bangladesh, an orthopaedic surgeon is being trained to carry out spinal fixation surgery, where none previously existed and a graduate physiotherapy and occupational therapy programme is being supported. Finally in Uganda, training and equipment to carry out ultrasound for the first time is being provided.
3. To involve NHS staff through a clinical interest group, and to provide unique training and development opportunities for them.Staff are often eager to give their time and energy and, where possible,they are given the opportunity to take part in projects.
4. To draw on charitable resources to fund its work. Funding is mostly needed to free up staff to be able to go on OPT IN projects and, to a lesser degree, to buy equipment. NHS money is not used and NHS work is never compromised.

Recently I visited Africa with John Sloan, the manager of OPT IN and a consultant in A&E medicine, to identify the training requirements for two rural hospitals in Uganda. It is our hope to establish further training in surgery, orthopaedics, trauma,ultrasound and radiography if possible. OPT IN is growing organically but within our own trust the enthusiasm and interest within many disciplines seems boundless.

John Sloan, OPT IN manager and consultant in A&E medicine, with Dr Elizeus and Sister Gilder at Kamuli Hospital, Uganda.

How to get involved

I recently approached the Society of Radiographers to find out whether there was a core group or body of radiographers that were interested, or already involved in sharing and enhancing their skills overseas. Financial support and sponsorship can be sought from a variety of avenues but what is really required is a group of dedicated individuals willing to donate time and energy for very just rewards.

Professional bodies such as the SoR can play an invaluable role in co-ordinating such groups, and the purpose of this article is to gauge the level of interest amongst SoR members. If you are interested or would like any further information on becoming involved in developing radiographic training/facilities in Africa, please contact me at rosieconlon@supanet.com

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1. Department For International Development Plans. (November 2000). Better health for poor people.
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