PERSONAL PRACTICE

Developing sustainable international partnerships in child health and paediatric care

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One of the UK government's policy initiatives when taking office in 1997 concerned international development. This highlighted an intention to expand partnerships between institutions in the UK and poorer countries; specifically "to work closely with other donors and development agencies to build partnerships with developing countries".¹ The prime policy goal was to eliminate poverty and encourage economic growth that benefits the poor. Since children are a group most vulnerable to poverty, a specific intention was to support international efforts to "enhance children's well-being including through the provision of effective and sustainable health services".¹ This approach now features in documents from the UK's Department for International Development (DFID) with all four of its International Development Targets relating to child and maternal health (table 1).²

UK institutions have already established linkages or partnerships centring on child health or paediatric care with counterparts in developing or resource poor countries. These involve National Health Service institutions, non-governmental organisations (NGOs), and academic units; a selection is listed in table 2. In order to encourage the development of further partnerships, this article, from the RCPCH's International Task Force on Children Affected by War and Absolute Poverty, describes some linkages to show what is possible.

The joint activities undertaken are many and various and include service work, research, teaching, exchanges of staff, training, and support during and after humanitarian emergencies relief. The scale and funding of the activities vary greatly but a consistent feature is that developed from initial contact between individuals. This distinguishes the UK relationships from those of some other industrialised countries where the relationships are stimulated and supported by bilateral strategic relationships.

We describe three examples of a small service and teaching partnership (Ethiopia–

Leicester), a larger research and teaching enterprise (Malawi–Liverpool), and emergency and post-emergency support (Child Advocacy International with the International Health Exchange).

A small scale service and teaching partnership—Ethiopia and Leicester

This modest but effective partnership started in 1997, through the auspices of the Tropical Health and Education Trust (THET) charity, which puts institutions from the UK in touch with those in resource poor countries. A formal link was formed between Gondar College of Medical Sciences in North West Ethiopia and a consortium of Leicester institutions (table 2). Gondar (population 60 000) is Ethiopia's second city. Its hospital has 320 beds, and serves a regional population of 3 million. Wards are crowded with a high patient to staff ratio, and laboratory facilities are basic. The commonest disorders are those typical of sub-Saharan Africa: infectious diseases including tuberculosis, HIV infection, pneumonia, hepatitis, and malaria. Other conditions include rheumatic fever and sigmoid volvulus (the commonest surgical emergency). Gondar's medical college annually trains 50 doctors and 80 nurses, as well as health assistants, public health workers, and technicians.

The initial linkage followed a visit by Leicester's Professor of Child Health to Ethiopia, and a return visit by the Dean of Gondar Medical College. After this a meeting of interested staff was called in Leicester. Representatives attended from paediatrics, infectious diseases, nursing, ophthalmology, library services, and university teaching staff, resulting in a multidisciplinary committee providing a broad based rather than exclusively paediatric approach. Eventually "mirror committees" of counterparts were established in Gondar and Leicester.

The partnership is mutually beneficial, providing teaching and training in clinical and research areas for Gondar; with the research projects identified being those considered likely to translate into improved clinical practice. For Leicester the link provides an opportunity to gain skills and experience of medical and nursing practice in a tropical setting; with sharing of research and clinical projects. Exchange visits last for two to four weeks and visitors attend in

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Table 1 International development targets²

Reduce by two thirds the rate of infant and child mortality by the year 2015
Reduce by three quarters the rate of maternal mortality by 2015
Attain universal access to reproductive health services before 2015
Achieve a 25% reduction in HIV infection rates among 15–24 year olds in worst affected countries by 2005, and globally by 2010

Table 2 A selection of current child health and paediatric partnerships between the UK and developing/resource poor countries*

Host country/institution	UK institution	External support	Principal activities†	Period	UK contact for further details
Afghanistan (Kabul Hospital)	Craigavon, NI	CAI	Disaster relief	1996 onwards	Charles Shepherd; cshepherd@cahgt.n-i.nhs.uk
Albania (Mother Theresa University Children's Hospital, Tirana)	Barnsley District General Hospital	CAI and Clothworkers	Establish postgraduate medical centre and nursing Teaching	1997 onwards	John Bridson; John.Bridson@bdgh-tr.trent.nhs.uk
Bangladesh	Institute of Child Health/University College (London)	Wellcome Trust, World Bank, UNICEF, WHO	Paediatric oncology, APLS, renovation of children and neonatal units	1985 onwards	Andrew Tomkins; a.tomkins@ich.ucl.ac.uk
Bosnia–Herzegovina	Royal Liverpool Children's Hospital NHS Trust (Alder Hey)	Child Advocacy International, Lions Club International	Research Medical and nursing, teaching, and medical research	1997 onwards	Joan Robson; JoanRobson@rlch_tr.nwest.nhs.uk Barry Pizer; B.L.Pizer@liverpool.ac.uk
Egypt (Cairo)	University of Aberdeen	British Council	Research	1998 onwards	Barbara Golden; b.e.golden@abdn.ac.uk
Ethiopia (Gondar College)	Leicester Royal Infirmary, University of Leicester Medical School, and the School of Nursing at De Montfort University Oxford and London Universities	Tropical Health & Education Trust (THET), Children's Research Fund (Liverpool)	Medical and nursing, teaching, and medical research	1997 onwards	Elaine Carter; elaine.carter@dial.pipex.com
Gambia	St George's Hospital Medical School	MRC and others	Research	1950s onwards	Steve Allen; sallen@mrc.gam
Ghana	Institute of Child Health/University College (London)	Internal resources	Paediatric infections, disease and microbiology Research	1995 onwards	Mike Sharland; msharland@sghms.ac.uk
Jamaica	Liverpool University	Varied sources	Research	1970 onwards	Sally McGregor; s.mcgregor@ich.ucl.ac.uk
Malawi (Malawi Medical College)	Royal Liverpool Children's NHS Trust (Alder Hey)	Wellcome Trust	Research on infectious diseases, nutrition, maternal and child health	1980s onwards	Joan Robson; Joan Robson@rlch_tr.nwest.nhs.uk Tony Hart; Tony Hart cahmm@liv.ac.uk
Malawi (Queen Elizabeth Hospital, Blantyre)	N Tyneside Hospital	Nil	Nurse exchange teaching and training, paediatric oncology	1993 onwards	Joan Robson; Joan.Robson@rlch_tr.nwest.nhs.uk
Nepal	Royal Liverpool Children's NHS Trust (Alder Hey)	NS	Paediatric oncology	NS	Barry Pizer; B.L.pizer@liv.ac.uk
Nepal	Institute of Child Health/University College (London)	Wellcome Trust, DFID, UNICEF, and WHO	Research	1992 onwards	Anthony Costello; a.costello@ich.ucl.ac.uk
Nicaragua (La Mascota Children's Hospital, Managua)	Middlesbrough	CAI	Child protection, APLS training, pain control and palliative care	1998 onwards	Neela Shabole; nshabole@compuserve.com
South Africa (Kwa Zulu Natal)	Institute of Child Health/University College (London)	Wellcome Trust and DFID	Research	1995 onwards	Andrew Tomkins; a.tomkins@ich.ucl.ac.uk
Uganda (Mulago Hospital and Makerere University, Kampala)	Dorset County Hospital	CAI	APLS, pain control and palliative care	1997 onwards	Mohammed Kibrige; m.s.kibrige@ncl.ac.uk
Ukraine (Cherkassy Children's Hospital)	Institute of Child Health/University College (London)	DFID	Research	1995 onwards	Andrew Tomkins; a.tomkins@ich.ucl.ac.uk
Zambia (Lusaka University Teaching Hospital)	Institute of Child Health, Birmingham	Internal resources	Teaching and research	1997 onwards	Rob Moy; r.j.d.moy@bham.ac.uk

*Data as of April 2000. This table represents only some of the partnerships and linkages that the Task Force members are aware of. It is meant to be illustrative rather than complete. Please note that though e-mail addresses have been checked they frequently change.

†All the partnerships listed are also engaged in institutional capacity building in the developing country.

NS, not stated; CAI, Child Advocacy International; DFID, Department for International Development; APLS, Advanced Paediatric Life Support.

pairs. The paediatric visits have resulted in research projects in asthma (surprisingly rare among Ethiopian children), disability, and anaemia. Students in Gondar rarely have textbooks, and paediatricians in the two countries are collaborating to add tropical chapters to a Leicester based paediatric text. The deans of Gondar and Leicester are cooperating to change the Gondar undergraduate medical curriculum from a didactic style to a problem based, student directed learning approach. A course on research methodology and statistics took place in 1999 and a basic paediatric life support course was held in Gondar in 2000. Beyond paediatrics a new student nurse curriculum in Gondar is being developed by the heads of the two nursing schools. Clinical

nursing skills on the children's ward in Gondar are excellent, but these are being developed by nursing exchange visits. Future plans include enhancing training of laboratory staff, researching rheumatic heart disease, improving the Gondar library (which is large, but poorly catalogued, with donated out of date books), teaching and training in ophthalmology, and care for disabled adults and children. As in many developing countries new electronic technologies present opportunities, and communications have greatly improved since the Gondar College has developed the use of e-mail, internet, and fax facilities.

Although an overall success, the link has experienced problems. Progress and communication (despite e-mail) are slow. Obtaining

leave from the UK is supported by a National Health Service Executive Letter in 1995, but this requires updating since it was cancelled in 1996.³ Continuity would be improved if Leicester had a permanent member of staff in Gondar. The poverty and lack of resources in Gondar is sobering, and high technology secondary and tertiary paediatric care in Leicester, though impressive, is often irrelevant to practice in Gondar. It has however become clear that a high standard of paediatric medical nursing care is the essential ingredient in the care of sick children, whether in Gondar or Liverpool. Funding was initially by THET, followed by a three year grant from the Children's Research Fund of Liverpool, supplemented by donations from local groups. The nursing programme has been backed by Leicester's de Montfort School of Nursing.

A larger research based link—Malawi and Liverpool

A more established link exists between Liverpool and Malawi.⁴ Malawi's first medical college was established in the late 1980s and had its first graduates in 1992. Research links between Malawi and Liverpool go back further, for example those concerning severe malaria in children. When the medical college was established, these links strengthened the teaching base. There are also clinical links. The Royal Liverpool Children's NHS Trust (Alder Hey) and the charitable Chris Brown Nurse Exchange Fund have financially supported exchanges with the Queen Elizabeth Hospital in Blantyre, Malawi. A senior paediatric nursing sister from Blantyre worked in Alder Hey for three months in 1993 and found this so valuable that regular nurse exchanges have taken place since then. Each year two nurses from Alder Hey work in Blantyre for three weeks. Two nurses from Blantyre then travel back to work in Liverpool for eight weeks. Doctors from accident and emergency, audiology, oncology, and pathology, and an ultrasonographer have been given special overseas leave to undertake clinical work, and undergraduate and postgraduate teaching in Queen Elizabeth Hospital and its University Department of Child Health. Links also exist for paediatric oncology and are part of a broader programme of support operating between the UKCCSG and developing countries.

In 1995 the Wellcome Trust established a Centre for Research in Clinical Tropical Medicine at the Faculty of Medicine of the University of Liverpool, with a major intention to strengthen research links with Malawi. In 1999 a Wellcome Trust research building opened in Blantyre, around which research programmes have developed on diarrhoeal diseases, reproductive health, and pneumonia, in addition to the ongoing focus on malaria. Links with the USA (University of Michigan) have also been formed and because of the existence of the Malawi medical college, local medical graduates have an opportunity to play an active role in this research. Publications are numerous, focusing on the areas of infectious disease, nutrition, and maternal and child health.⁵⁻⁸

The Liverpool links extend elsewhere. Ten departments in Alder Hey have links with paediatric units in Europe, Africa, Asia, and South America. Achievements and outcomes include nurse exchanges, sponsorship for people to attend UK meetings, and teaching and training in practical skills for undergraduates and postgraduates in many health care professions. Qualified partners abroad have frequently taken advantage of the Master and Doctorate programmes at the Liverpool School of Tropical Medicine.

Paediatric care during disasters and time of war or civil disturbance

During humanitarian disasters, children in particular suffer, and providing for their medical needs is a priority.¹ Priority is often given to primary care level at such time, but secondary care facilities may be weak.⁹ Child Advocacy International (CAI) was founded in 1995 by British paediatricians to focus on the hospital care of sick and injured children during humanitarian disasters. It has worked closely with the UK Committee of UNICEF in the UK and is now working with the World Health Organisation (WHO) in developing the Child Friendly Healthcare (Hospital) Initiative (CFHI). While the main emphasis is on medical education and the provision of essential equipment and supplies, there is particular support for interactive learning programmes, such as the Advanced Paediatric Life Support (APLS) courses which have been modified and translated locally when necessary. (The Board of the Advanced Life Support Group in the UK has given permission for CAI to promote and develop APLS programmes in countries involved in emergencies or recovering from emergencies.) Links between children's units in the UK and those in countries suffering complex humanitarian emergencies have been a powerful way of introducing medical education. Links have in particular been made between NHS units in the UK and hospitals operating in or recovering from armed conflicts (table 2).¹⁰⁻¹² Funds have come from large donors such as Lions Clubs International, the UK DFID, the US Agency for International Development (USAID), and through collaborations with other aid agencies such as Children in Crisis and Children on the Edge. Other countries are now also appreciating the need to involve paediatricians in disaster relief. For example, the official Canadian Disaster Assistance Response Team now consults with the Canadian Paediatric Society.¹³

CAI's approach in forming links between NHS units in the UK and hospitals operating in or recovering from armed conflicts (table 2) has largely, although not exclusively, focused on paediatricians and sick children's nurses going from the UK to work for variable periods of time in the children's units of resource poor countries. They take with them guidelines and teaching materials translated into the local language. Most beneficial has been the work undertaken by specialist registrars and consultants from the UK, who have gone to work with and alongside local paediatricians in the

hospitals of the affected countries. The period spent in the recipient country should be at least a year, though a minimum period of two months has been identified as useful in some cases. There are often considerable security problems, and the issue of insurance and training becomes extremely important for staff going from the UK to work in environments such as Afghanistan or Kosovo. CAI policy ensures that the staff going to work in such situations receive appropriate training. The first RCPCH training course in International Child Health, aimed at staff working in complex humanitarian emergencies, was organised with CAI and International Health Exchange in 1999. Most of the doctors and nurses attending have subsequently worked on link programmes.

International Health Exchange

Working with CAI has been International Health Exchange (IHE) a non-government organisation which works with international aid agencies to recruit, train, retain, and support health personnel working in relief and development programmes. IHE maintains a central register of health personnel available for international work; through this it is able to identify candidates for overseas posts on behalf of operational relief and development agencies. It also publishes a bimonthly magazine, *The Health Exchange* (available by contacting IHE), which contains features, news, and debates on international health and development issues. A supplement publishes job advertisements and agency listings. IHE runs short courses on health care in emergency and development settings, as well as on specialist topics for those who intend to practise their profession in a developing country environment. IHE also provides information and advice to individuals interested in working in developing countries, and agencies wishing to recruit health workers for relief and development programmes.

Learning from other countries

Some UK-developing country links have had short life spans and lack sustainability. The approach of some other industrialised countries is to promote long term relationships between their academic groups and counterparts in southern countries with which they have strategic relationships (for example, France and Cote d'Ivoire; USA and Thailand). However, another model of sustainable partnerships comes from colleagues in the Netherlands and Sweden. The University of Nijmegen, the Netherlands, has been linked with Mwanza Region in Tanzania for over two decades. Building on previous missionary commitment to hospital services, some Nijmegen medical graduates became medical officers in district hospitals providing environments which permit medical students from Nijmegen to spend their elective in a developing country, receiving structured education, as well as experience of seeing medicine and diseases in the tropics.

There are limits to what paediatricians can contribute in resource poor settings. Paediatric

links are most commonly with developing country medical schools or larger hospitals in capitals or major cities (table 2). District authorities, however, usually require personnel with more generic public health skills, and district hospitals often need multipurpose medical officers who can undertake emergency surgery, including obstetric procedures, rather than a paediatrician.¹⁴ Again the Dutch have an interesting approach in a programme overseen by the Netherlands Association of Tropical Medicine, which has developed a syllabus to train doctors during two years in the necessary skills required in the fields of surgery, obstetrics and gynaecology, and tropical disease management (including basic tropical paediatrics), in order to be useful generic medical officers in developing country settings.¹⁵

Developing sustainable international partnerships in child health and paediatric care

Perhaps the most important single issue in ensuring the success of a link is the enthusiasm and persistence of individual UK paediatricians. Support from the management of the NHS hospital must also be forthcoming. Finally, little can be achieved unless the regional advisers in paediatrics of the RCPCH, support junior staff who wish to work abroad, and recognise this time in accreditation. Sadly the regional advisers are constrained by the rules on specialist training, although the situation is improving. An example of this is the joint development between the RCPCH and Voluntary Service Overseas. Specialist paediatric registrars who have completed at least two years of their training will have the option of applying for a year working in a centre in a developing country. They will have an in-country and a UK mentor with whom they will communicate regularly. This year will be recognised towards their training.

One of the main problems identified with respect to linkages concerns the difficulties in bringing local paediatricians out of countries where there are emergencies or recent emergencies. They may not necessarily want to return to the traumas inherent in their countries and can see the better health care facilities that might be available to their own families in linked countries. When they do return, the doctors that have stayed behind may find it difficult to accept the ideas that have been received, particularly if the doctors who visit the linked hospitals in rich countries are not at the very highest levels of seniority.

Getting started

There is a wealth of experience of how to (and how not to) establish linkages and it is beyond the scope of this paper to describe these in detail. There are many charitable resources and much expertise to draw on; there is even a charity supporting health libraries.¹⁶ It is important to reiterate that almost all the partnerships that developed from initial contacts between individuals in two countries and two way visits to each other's countries as a first step are usually essential, and inspirational.

When partnerships are being formed there is usually a great danger of "wheel reinvention". Therefore anyone interested should in the first instance contact the college members who are listed in table 2.

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