Medical collaborations between developed and developing countries

J.B. EASTWOOD¹, J. PLANGE-RHULE¹,², V. PARRY³ and S. TOMLINSON*

From the ¹Department of Renal Medicine and Transplantation, St George’s Hospital Medical School, London, UK, ²Department of Medicine, Komfo Anokye Teaching Hospital, Kumasi, Ghana, and ³Tropical Health and Education Trust (THET), London, UK

Introduction

In the field of health and medicine, there is a long tradition of collaboration between developing countries and Western nations. These collaborative efforts have embraced teaching, research, and provision of training and personnel, as well as donations of resources and technological help.

In the late 1990s, the medical press began to allocate significant space in their journals to the issue of such collaborations between health-care workers. Are inputs and outputs equal?¹ How much of any assistance that has resulted has been based on the needs of, and is at the request of, the recipient health worker or institution?² How has the ‘information gap’ been reduced?³ How can the problem of ‘Without funds you cannot carry out good research, but without good research you cannot attract funds’ be solved?⁴

The underlying philosophy

We believe that links formed on the basis of the hopes and aspirations of those doctors and other personnel practising in their own countries—whether working in village settings, district hospitals or medical schools—will produce the best results. Table 1 summarizes the important components of a mutually beneficial link.

In all developing (as in many developed) countries, medical schools have considerable difficulty in recruiting teaching staff. This means that career development opportunities are likely to be limited. Similarly, research opportunities, if available, may only be short-term. There are also likely to be considerable difficulties in providing high quality clinical care. A link works best in the context of existing structures, rather than by creating parallel health systems or research centres.

Getting things started

International collaborative links often start with two individuals, but are unlikely to be sustained unless there are identifiable achievable gains for both parties involved. What are these gains? What is needed at each end of the link?

Less developed country

A link with a sister institution in a developed country has the potential to contribute in three areas: teaching and education, research and in the clinical care of patients. Once the link is established, there may well be spin-offs for undergraduates and postgraduates, whether medical or nursing. There should be an enhancement of the learning environment, and other benefits may
eventually accrue, e.g. library enhancement, computing facilities, etc. Small advances in these areas can create an environment where students and young doctors—hopefully including the most academic—can take pride in their work and aspire to a long-term medical career in their own country. Such individuals can eventually become role models for their successors.

More developed country

Any health professional contemplating a link with a colleague in a less-developed country will need to commit themselves to the collaboration for a number of years. Much of the medicine practised in the West is very limited in its variety, both medical and geographical. Indeed, it is not uncommon now to spend one’s whole career, from Year 1 medical student to House Officer to permanent post, within a radius of no more than 20 miles. For many doctors, a link with a clinician working in a country with a different culture is an opportunity to expand the horizons of their specialty.

The opportunities for collaboration in high quality research and involvement in teaching of overseas undergraduates and postgraduates will undoubtedly enhance performance in the clinician’s own specialty at home. For the institution, there is the opportunity to share some of its resources with another less well off, and to benefit from broadening the experience of its staff.

Both countries

Forming a link with a clinician working in a country with a different culture is an opportunity to expand horizons, and for those whose links are between the UK and the tropics, there will be a very different spectrum of disease. Likewise, the different health systems and structures allow each participant to view his own institution from a different perspective.

Financial aspects

Links such as these need funding. In our experience, financial motives are unlikely ever to be the reason for forming a link; the will to form a link comes first, and if one is fortunate grants and other initiatives follow. The Association of Physicians’ Links with developing countries initiative, administered through the Tropical Health and Education Trust (THET), is one body offering pump-priming grants for such links.

A link in detail

Institutional aspects

From the mid-1980s, there has been a collaboration at institutional level between the School of Medical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana, and St George’s Hospital Medical School, London, UK. The first link was in Haematology (1986) and others followed (particularly Infectious diseases, Paediatrics and Microbiology). Arising out of this, a Code of Practice for the partnership between the two medical schools was drawn up.

In 1995, the wish of one of us (JPR) to initiate a link was facilitated through an individual with existing links. The two individuals (JPR and JBE) forming the developing link drew up a list of areas of common interest and possible collaboration, and applied for funding. In 1995, we were awarded a grant of £5000 by the Association of Physicians. The money was used to set up a blood pressure...
to fund bilateral visits, and to make arrangements for reliable communication. This meant the purchase of a laptop computer with internet access.

Where possible, visits have been annually in each direction: those from Kumasi to London lasting 5–11 weeks and from London to Kumasi lasting 1–4 weeks. Objectives and a programme (always flexible) are agreed before each visit and a report written at the end.

**Communication**

Communication issues are probably the most testing element of any link. It should be remembered that many of the standard means of communication in Western countries are severely restricted. In Kumasi, for example, the hospital telephones are limited in number, and more or less restricted to clinical areas, and the junior doctors have neither bleeps nor pagers. Fax machines, photocopiers and clinical secretaries are normally the privilege of Heads of Department. It is easy to see how isolated individuals can become. A budding clinician or research worker may have access to few facilities, and will find that it is necessary to go to the main Post Office or city centre to pay for the use of a telephone, fax machine or photocopier.

There remain three standard modalities of communication, any one of which is likely to be ‘under-performing’ at a particular time: e-mail, mobile telephone and ordinary mail. E-mail requires bilateral understanding and cooperation, but is very reliable. In our experience, mobile telephone conversations, while useful for rapid clarification and discussion, end with over 50% of conversations being cut off. Ordinary post remains very useful for paper transfer. For research projects, international couriers such as TNT, DHL etc. are invaluable.

**Teaching**

It is useful for students and teachers to learn from as wide a group of participants as possible. It is valuable also for visitors to see the similarities and differences between different curricula and teaching establishments.

**Research**

Our research plans have evolved in ways not envisaged at the start. Indeed, of the four projects proposed at the very beginning of our collaboration, only one has so far materialized. On the other hand, our close association, coupled with intermittent visits, has enabled other research ideas to take root. Perhaps the most important element in this formative process is equality of inputs from both ends of a link as to the projects and their time-scales. Similarly, outputs in terms of authorship, publications, etc. should be equal, where possible.

The Association of Physicians/THET grant has been followed by a substantial grant from the Wellcome Trust for a community-based project on stroke in a number of villages in the vicinity of Kumasi. Other charities have provided small amounts of funding from time to time. Four publications have resulted so far and others have been submitted or are in preparation.

**Clinical benefits**

Although the original basis for forming the link was to enhance teaching, training and research, there have been clinical spin-offs. In Kumasi, the most obvious nephrological problem initially was the lack of diagnostic ultrasound. Although not as a direct result of our link but through THET, this has been resolved, and attention can be focused on other needs. In 1999, there was no dialysis (either haemodialysis or peritoneal dialysis), even for patients with acute renal failure. Since then we have trained four nurses in the techniques of haemodialysis, each spending 4–6 weeks at St George’s Hospital; all four have returned to work at Komfo Anokye Teaching Hospital. In practice, however, clinical improvements are likely to be slow, and of course need close collaboration with local managers and administrators.

**Training**

Following our own collaborative visits, it is hoped that in the next year trainees in nephrology will be able to undertake short visits as an element of the RCP/THET supported postgraduate training programme mentioned below. It is hoped that the first Kumasi trainee will come to London for 4–6 weeks training in nephrology in the next 6 months. To enable this exchange to function in both directions, it is hoped that the Kumasi post will in due course be recognized (if only on a short-term basis) for training of UK Specialist Registrars.

**Career enhancement**

JPR, whose academic career includes a PhD, has increased his publication profile, and has recently become an Honorary Lecturer at St George’s Hospital Medical School. Overall, both in Ghana and in general, his academic standing has improved
considerably. JBE, who spent 2 years in Ghana from 1968–1970, has been able to revive his acquaintance with Ghana and expand his academic and clinical horizons.

Other links with Kumasi

There are a number of links between institutions in the UK and the School of Medical Sciences in Kumasi. The link between the University Department of Medicine at Manchester Diabetes Centre and the School of Medical Sciences at Komfo Anokye Teaching Hospital developed by chance, and again was initially funded through support from the Association of Physicians’ scheme to establish an educational link in diabetes. This was originally for doctors in training, but expanded to include nurses. The result was a series of exchanges between Kumasi and Manchester, which resulted in the establishment of a Diabetes Centre in Kumasi with major input from local nurses trained in Manchester.7

As a result of the good relationship built up through these links, the then Dean of the School of Medical Sciences, Professor George Brobby, requested assistance with structured postgraduate education in medicine. Many Ghanian graduates in medicine seek their postgraduate education and training overseas. Historically, this education has often been unstructured and at SHO level. Ghanaian doctors in the UK aim for the MRCP, and if successful, tend to remain in the UK. It has been estimated that, of postgraduates leaving Ghana before getting married and having children, more than 50% will continue their medical careers outside Ghana.

Those who do stay in Ghana aim for the Fellowship of the West African College of Physicians. Postgraduates in Kumasi have felt disadvantaged, as the examination is Nigeria-based, and the failure rate is high. THET, with funding from the Royal College of Physicians, has established a scheme for the provision of structured postgraduate education based in Kumasi. It has also helped establish an office to support the programme and, by contacting specialist societies, has identified a pool of teachers prepared to commit themselves to teach for about two weeks each year for 3–5 years. There have already been a number of highly successful visits.

The future

The University in Kumasi is developing taught Masters degrees for its postgraduate students. There is also a proposal to establish a College of Physicians in Ghana. The political stability of Ghana facilitates long-term projects and objectives. Establishing and further strengthening links, especially between postgraduates in Ghana and the UK, would have mutually beneficial consequences, in the short, medium and long term. One way of facilitating this process is to further develop institutional links. Multiple links within an institution can have many different components and require clear support at institutional level. Managers need to be involved from the outset so that a link can involve different cadres of health worker. This is particularly important when laboratory technicians, nurses and less senior staff are involved, as links require visits to and from the UK, and so special leave may be needed. Coordination of the different components is essential to ensure that activities are complementary and fit in both with the aims of each institution, and with the overall objectives of the link.

As more individuals and departments become involved in a link, so communication between them becomes more difficult, but at the same time, more important. An isolated link in a single specialty is likely to be less stable than multiple links, since there is no opportunistic contact with people

Table 2  Lessons learnt from the Kumasi link

| The need to focus primarily on needs identified in Africa, because the health workers usually already know what is required |
| Committed and influential champions at both ends of the link are essential; bringing a senior physician (not a diabetologist) to Manchester was the key starting point in the diabetes link |
| Do not expect immediate responses to communications |
| Before establishing a link, determine what other links there might be in the institution (there were at least three established links between Kumasi and the UK before the diabetes link, which were not known about until some time after the diabetes link was established) |
| Without exception, teachers have returned commenting on the enthusiasm of the postgraduates |
| Research opportunities for UK postgraduates in infectious diseases and in the emerging epidemics of non-communicable disease are enormous |
| We should find ways of encouraging and funding our Specialist Registrars to develop educational and research links, while at the same time broadening their experience of their specialty |
involved in other links on a day-to-day basis. In such a link, departure of a single member of staff can seriously destabilize the link, and threaten its future existence.

Links between institutions in countries that differ so significantly in their geographical, climatic, political, cultural and religious characteristics provide enormous opportunities for mutual benefit and understanding, and for the development of enduring professional and personal friendships. In the current international atmosphere, the need for such links is more pressing than ever.

Acknowledgements

JPR and JBE are grateful to the Kathleen Valles Charitable Trust for a number of ad hoc grants of pump-priming funds.

References