



The buttressing coalition of the PNGIMR: an example of international collaborative research

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Good partnerships are based on mutual benefit. This also applies to international partnerships in medical research. The Papua New Guinea Institute of Medical Research (PNGIMR) has had many successful research collaborations, from which an interactive coalition has been built that is committed to supporting the PNGIMR without jeopardizing its integrity. This coalition also involves policy-makers from the Department of Health, teachers at the Medical School of Papua New Guinea and the Medical Research Advisory Committee of PNG. The PNGIMR's Buttressing Coalition supports research and training, but also assists the process of transferring research results into policy. The concept of 'buttressing' is explored and the activities of the Buttressing Coalition are briefly described here. The idea of the Buttressing Coalition is a response from the international medical research community to globalization, and could be applied elsewhere, following the model developed in PNG.

I once suggested that partnerships across the north–south divide were never simply a case of the strong north assisting the weak south – each side had its strengths and the best partnerships had explicitly acknowledged mutual benefits. When the assumption on the north is one of total superiority, however, then that is the way it will be perceived as long as that partnership survives. Today, colonialism still exists, but is usually hidden and often unconscious; it can reveal itself by attitudes and assumptions. Sometimes, colonialism softens a little into paternalism, or it is replaced by anticolonialism, an 'ism' that adopts many guises but is as dangerous as any 'ism'. Moreover, although it is usually the case that the local people know best about local issues and the customary, culturally appropriate ways are the best ways, this is not always so. Between groups of human beings, there are no dichotomies, just differences. This is one of the ground rules by which the Papua New Guinea Institute of Medical Research (PNGIMR) operates.

This ground rule applies in dealing with the communities participating in the PNGIMR's many community-based studies, which is covered in a companion article by John Reeder and John Taima in this issue of *Trends in*

Parasitology. The rule also applies in dealing with scientific collaborators. Each collaboration is unique, and the PNGIMR has many of them. To formalize the linkages, to explore the nature of these linkages and how best they will work, to create crosslinkages between different collaborating groups and to involve other members of the PNG health community in these relationships, the PNGIMR's institutional collaborators have, since 1999, been gathered together to form a Buttressing Coalition.

What's in a name?

The concept is simple: the Coalition comprises collaborating scientists and the institutions to which they belong. The Coalition acts to buttress the PNGIMR, to support, maintain and strengthen it without jeopardizing its integrity. **The image is that of the buttresses and flying buttresses of a cathedral or, in a way more culturally appropriate for the tropics, that of a rainforest tree with its buttress roots which support and maintain the tree and help it to breathe.**

The Buttressing Coalition began with the groups who were already collaborating with the PNGIMR but, since 1999, others have been added by invitation or by request, either as new collaborators or as interested parties, with the potential or the intention to collaborate or simply to support the PNGIMR through advocacy or by providing academic training opportunities. The Coalition has so far held two meetings (both in Australia because there are many Australian members); participants also came from PNG, USA, Switzerland, UK, France and Japan. The first meeting held in Melbourne in 2000 had ~30 participants; and ~60 attended the meeting in Cairns two years later; and the membership has since grown to be over a hundred. Between meetings, the partnerships work on a one-to-one basis between the collaborating scientists and the Director and staff of the PNGIMR. However, additional interaction with all Coalition members takes place by e-mail. The meetings have enabled partners to interact and to coordinate their activities. They have also allowed the participation of Papua New Guineans from other institutions, including Secretary for Health and other senior members of the Department of Health, and the Executive Dean and other senior members of the School of Medicine and Health Sciences of the University of Papua New Guinea. Their input has been invaluable and they have

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gained greater insight into the PNGIMR's activities, philosophy and mode of operating, as well as a greater understanding of the research process itself. New professional links have been forged. All members of the Coalition have been encouraged to extend their stay in the country by a day, so that they can interact with staff and students in the Medical School.

Ethical considerations and institutional support

The PNGIMR, the PNG health community and the Medical Research Advisory Committee (MRAC) of PNG are central to the functioning of the Coalition. All initial contacts for collaboration go to the Director of the PNGIMR. Proposals are worked out together and approved by all parties before submission for funding. It is then the Director's responsibility to submit the proposal to the MRAC for scientific and ethical approval. In addition to being the national ethical review committee, the MRAC acts as the institutional ethical committee or review board of the PNGIMR. Links with the Department of Health and, if necessary, the University are also provided initially by the Director. When the proposal has been approved and the collaboration starts to prepare for the project, local arrangements for visas, accommodation and internal travel are made by the PNGIMR. After a collaboration has been going on successfully for some years, and several projects have been jointly undertaken, a small cadre of colleagues is created within the collaborating institution. At this stage, the concept of buttressing becomes especially relevant, when the institution itself becomes a collaborator of the PNGIMR.

Institutions are essential for the process of development [1]. National health research is an essential part of development [2], as promoted by the Commission on Health Research for Development [3] and the World Health Organization [4]. Therefore, each country in the third world needs a national health research institution that will play this essential role in development. In addition, it needs a national and/or an institutional ethical review board if the essential national health research is to be carried out ethically. There are many advantages for a small country to have a board or committee that acts at the national level and is located within the Ministry of Health, as is the MRAC of PNG. However, the important thing is that there is an independent ethical review body of some kind.

It is not essential of course for the national health research institution to be the national institute of medical research, as in PNG. Universities or hospitals could fulfil this role. However, these institutions have so many other functions that, if research is to flourish, a national medical research institute, if not essential, is highly desirable. The PNGIMR's model of a Buttressing Coalition applies best to such an institution. If the institution does not exist, it could be created with project aid money – an attractive one-off for aid donors – and sustained by modest government budgetary support and by the partners in a buttressing coalition. Such a coalition is a sustainable way of achieving the institutional capability strengthening that was the central aim of the Research Strengthening Group (RSG) of the WHO/UNDP/World Bank Special

Programme for Research and Training in Tropical Diseases (TDR).

Although individual scientists are essential to the success of the PNGIMR's Buttressing Coalition, it is the coalition of institutions that provides the primary institutional capability strengthening to PNGIMR; both institutions and individuals receive the reciprocal benefits of the association. These institutions help to keep the PNGIMR functional, without taking it over. I believe that, if the opportunities created by globalization are to be fully exploited, we must take responsibility for cooperation at all levels – between individuals, between nations and between institutions. International links between research institutions, particularly between the first and third worlds, can create many interchanges of mutual benefit, as can reciprocal links between other kinds of institution in health – or in any other field, for that matter. We have to be prepared to act in support of our global partners and counterparts as part of professional solidarity, and not expect that governments or philanthropists will attempt everything. In the PNGIMR Buttressing Coalition, it is anticipated that as the reality of mutual benefit is more widely understood and diffuses through the respective overseas institutions, new collaborations and innovative exchanges will start to occur. We expect to build on our success in this way.

Not all collaborations will be fruitful, but the chances of success will be enhanced by association through the Buttressing Coalition with ones that are. Mistakes will be made; however, through the Coalition, by discussion of the principles and rules that underpin the PNGIMR's activities, the chances of others repeating those mistakes will be reduced.

Combating commando research

A third world country is vulnerable to exploitation and this does not apply only to logging companies. Medical researchers see the opportunities to obtain the information that they want, and they fly in and get it; when they've got what they want, they fly out again: 'commando research'. This practice is difficult to stop. The PNG MRAC now has general and strong support from the health community, but it did not in the past. If a particular University department chose to ignore the MRAC completely, there was not much that the MRAC could do except complain to the Minister. If foreign researchers came without MRAC approval and worked in one of the provinces with the connivance of provincial officials, it was difficult to apply sanctions. Involvement of the institutions of the Buttressing Coalition in MRAC-approved research, and their collective authority, provides the backing of the international research community and hands the MRAC a strong yardstick which it can use to beat research commandos.

The Buttressing Coalition also takes care to record and protect all samples collected in collaborative studies. It is recognized that these samples belong to PNG and that research collaborators are their custodians. They have a duty of care and they also have a duty of efficient use. Samples can be shared between members of the Coalition, with the knowledge and approval of the MRAC, so that

maximum information can be obtained from every specimen that was provided by participants of research studies. These samples are also part of the PNGIMR archives; when they can no longer be properly stored and cared for, they should be returned to PNG and not disposed of in other ways.

Seizing opportunities

At the Buttressing Coalition meetings, all members present a brief summary of their research projects, their training involvement and other supporting activities (such as library support). Training is always multifaceted. Senior and junior collaborators learn much by working in PNG, about disease, about people, about themselves – in the laboratory, in the clinic, in the community (or climbing mountains or exploring reefs). In return, they teach on the job and in seminars. PNG staff learn from their visiting colleagues, and later have the chance to spend a period of attachment in the overseas collaborator's laboratory or population sciences unit. Papua New Guinean and expatriate colleagues alike have earned higher degrees through the conduct of research in PNG; and Papua New Guineans have studied overseas under the auspices of Coalition members. Fellowships, aid agencies and universities all have rigid rules, but the Coalition institutions can operate more flexibly to enable career-development opportunities to be seized when they spring up.

Policy and academic matters in the context of research can also be discussed at a meeting of the Buttressing Coalition because of the presence of other members of the PNG health network. This increases understanding all round, creates new friendships and links, and extends the mutual benefit to a wider circle. This is important because in every society it is hard to convert research into policy, to get researchers to understand the constraints policy-makers operate under and to get policy-makers to be sympathetic to the enthusiasm of research workers and appreciate the long and uncertain course that an idea can take from bench to bedside, or from trial design to roadside clinic.

Not all fruitful scientific collaborations lead to strong buttressing support. This depends on the support provided by the institutional heads. However, the willingness is usually there. It might require some joint intervention from the individual scientists of the institution and the director of the national medical research institute: some directors find it easier to relate to directors; some professors listen only to professors. Once a commitment in principle is made, however, it can be promoted on every level.

Many of the actual research activities of the members of the PNGIMR Buttressing Coalition are covered by other articles in this issue of *Trends in Parasitology*, the authors of which include principal Coalition members. Further details of the PNGIMR's activities and its philosophy can be found in Ref. [5]; here, the concept of buttressing has been explored by using the general principles of the PNGIMR's work.

Perspective

One might ask, 'Having good collaborators and excellent projects is fine; what advantages are there in putting good collaborators together to form a buttressing coalition?' Hopefully, some of the advantages have been made clear: (1) the institutional involvement creating greater opportunities for two-way exchange and training; (2) the cross-links between coalition members; (3) the greater buttressing power with joined forces; (4) a means of recruiting new members for research or training; (5) the involvement of the health department and medical school, and the chance to review policy, ethical, strategic and practical issues; and (6) to place good science in a wider context, either through the e-mail list between meetings or in an open forum at one of the buttressing coalition meetings. The national medical research institute always provides the leadership, but bright ideas about science, research opportunities or new sources of funding can come from any source.

Finally, one might ask, 'Can the concept of a buttressing coalition be generalized?' I think so. The principles are clear and could be applied to different circumstances. It is important to recognize, however, that a functional buttressing coalition for PNGIMR did not spring forth immediately; indeed, much of its potential is still being worked out. Furthermore, it grew out of a strong collaborative research program. A virtual buttressing coalition was in existence before it was finally established, so its longevity is in fact much more than the three years since the first meeting took place. How would it work if one had to create the national medical research institute first, put the essential buttressing institutions in place around it and then try to build both collaborative projects and buttressing? I do not know. However, there are many reasons why it could succeed, given goodwill and commitment to the idea, and patience. Moreover, a national health research capability has the high priority to justify a sustained and patient effort by all parties. The leadership must come from the national institution that is being buttressed. Outside supporters need to be won – but once in, they can help bring in more partners. An appropriate national ethical review committee needs to be created. When this mixture is 'stirred', all kinds of beneficial interactions will occur.

References

- 1 Alpers, M.P. (1997) Research and development. *P. N. G. Med. J.* 40, 115–118
- 2 Siba, P.M. (1996) The important role of medical researchers in Papua New Guinea. *P. N. G. Med. J.* 39, 271–273
- 3 Commission on Health Research for Development, (1990) *Health Research: Essential Link to Equity in Development*, Oxford University Press
- 4 Advisory Committee on Health Research, (1986) *Health Research Strategy*, World Health Organization
- 5 Alpers, M.P. (1999) Past and present activities of the Papua New Guinea Institute of Medical Research. *P. N. G. Med. J.* 42, 32–51