

Moving to research partnerships in developing countries

Anthony Costello, Alimuddin Zumla

What should be the principles behind investment in research in developing countries? Does current practice overemphasise the results of research and ignore issues like ownership, sustainability, and development of national research capacity? We believe that the research model supported by many funding agencies remains semicolonial in nature. Foreign domination in setting research priorities and project management may have negative consequences which outweigh the apparent benefits of the research findings. National academic leaders and institutions need to be involved if research is to be translated into practice. The deterioration in academic infrastructure in many developing countries needs to be reversed as part of any research investment. A truly cooperative research partnership, which should be monitored by funding agencies, rests on four broad principles:

- Mutual trust and shared decision making
- National ownership
- Emphasis on getting research findings into policy and practice
- Development of national research capacity.

Existing research models in developing countries

The semicolonial model

Some styles of research interaction pay little attention to ownership, sustainability and the development of national research capacity. "Postal research," whereby Western researchers request colleagues in Africa to courier to them biological samples, is still practised, though less commonly than in the past. "Parachute research," whereby researchers travel to Africa or Asia for short periods of time and take back biological samples, is still relatively common. Results of both types of research are often published with minimal representation of African or Asian input.

"Annexed sites" for field research, led and managed by expatriate staff, still predominate as the model for investment. Undoubtedly, these sites have produced some of the most important, influential, and innovative research in tropical medicine, and many of the best researchers have been trained there. Proponents of such a model might argue that tight expatriate control increases the likelihood of good quality research findings when the work is being done in a difficult environment. We believe these "annexed sites" now represent an opportunity cost, attract promising academics away from national institutions, and their research findings are less likely to be translated into policy and practice.

Opportunity costs

Some of the problems with existing research models present as opportunity costs. Firstly, expatriates are expensive and should not be used for tasks better run by local staff, especially programme management.

Secondly, independent foreign research sites may be accused of what has been inelegantly termed "donor robbery." Like international agencies, these sites operate by using inflated local salary scales, and they seek and

Summary points

Much foreign-led research in developing countries remains semicolonial in nature and may have negative effects on partner countries

"Annexed site" research led by expatriates should be phased out and replaced by a partnership model in which nationals lead research projects, with only technical support from outsiders

Research funded through national academics and institutions improves the chances of findings being translated into national policy and practice

The principles of an equal research partnership need monitoring by funding agencies

compete for the best and brightest local talent. Salaries of academics or doctors are five to 20 times greater in an international organisation or research station than in government or university service. At some stage in their career these professionals inevitably jump ship. Research fellows in "annexed sites" may receive good training there, but few return to national institutions.

Thirdly, funding agencies have a moral responsibility not to ignore the appalling problems facing national institutions in developing countries. Over the past two decades the effects of economic decline, and of the structural adjustment programmes imposed on many countries, have led to drastic cuts in numbers of academic staff and salary levels, a lack of equipment and training opportunities, a sense of demoralisation, and isolation from international colleagues. Many researchers must moonlight in other jobs or do private practice to support their families, with inevitable effects on time available for research. It seems ethically questionable that foreign investment funds should pour into 10 or so internationally-led independent research centres in the poorest countries while national academic infrastructure withers on the vine. A merger of annexed sites with appropriate national partners would be preferable—and mutually beneficial.

Getting research findings into policy and practice

Research quality should not be the sole criterion for investment. "They're only interested in the number of good quality journal papers you produce," said one colleague about the criteria used by a funding agency to judge the success of a research project. High quality research obviously tops any list of evaluation criteria. To conduct poor quality research is bad ethics as well as bad economics, but to focus on the quality of research results or journal papers alone is clearly insufficient.

Transferring funding from expatriate-led research at annexed sites to national academic leaders and institutions is not simply complying with notions of political correctness. Lessons learned from research units

Centre for International Child Health, Institute of Child Health, University College, London WC1N 1EH

Anthony Costello
professor of international child health

Centre for Infectious Diseases and International Health, Royal Free and University College Medical School, Windeyer Institute of Medical Sciences, University College, London WC1N 6DB

Alimuddin Zumla
professor of infectious disease and international health

Correspondence to: A Costello
a.costello@ich.ucl.ac.uk

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Cultural factors greatly influence the interpretation and application of research findings

run by expatriates in developing countries are less likely to be incorporated into policy and practice, and foreign researchers tend to favour efficacy trials of novel interventions, rather than applied studies to improve the implementation of proved interventions.

Cultural and nationalistic influences play a much greater role in the interpretation and application of research findings than is widely assumed. Medical research, even in the industrialised world, is interpreted differently when France, the United Kingdom, or the United States are compared with each other.¹ Britain has been the chief proponent of the randomised controlled trial in medical research, whereas randomised controlled trials underpin very little of French clinical practice. Another cultural observation is that most doctors rarely read the medical literature of any country but their own. Most British doctors have no knowledge of French medical literature, nor indeed the names of any French journals,² yet the French health system is now considered by the World Health Organization to be the best in the world.³

In developing countries, populations also prefer to believe ideas generated by their own experts and political leaders, and innovations must adapt to local beliefs and customs. For example, India has always been wary of importing foreign research ideas and has forbidden “annexed site” research. Outsiders must work through Indian institutions. Policy and practice in India are much more likely to be changed in the light of national rather than international trials, usually under the auspices of the Indian Council for Medical Research.

Most recently, the power of conflicting cultural perceptions exploded in the controversy over the ethics of

HIV trials in developing countries. Leading US academics opined that trials without a control arm incorporating full antiretroviral therapy were unethical,^{4,5} even in communities where no drug therapies were currently available—a viewpoint vehemently opposed by African researchers, who considered these views overzealous, discriminatory, and impractical.⁶

Reaching the point of decision making

In the United Kingdom interest has been increasing in evidence based health care and how to overcome barriers to getting research findings into practice.^{7,8} Haines and Donald highlighted the importance of getting information to the point of decision making, and of overcoming social, organisational, and institutional barriers, through innovative educational strategies, particularly those that ensured better links between clinical audit, continuing education, and research professionals. Incorporating these ideas at the very start of research project design needs time and money. Bilateral donors have now built this concept into their funding applications, but medical research funding charities have still some way to go.

Principles of research partnership in developing countries

A partnership model

A partnership model can produce high quality research at lower cost, with greater influence on national policy and practice (table). In this model the research is line managed by local academic leaders. Senior expatriate academics visit regularly to provide advice and technical support, and expatriate junior research fellows within the country work with counterparts under the supervision of local academics. No expatriate is employed in a position which could be filled by a national, which reduces overhead costs substantially.

We suggest four broad principles for a truly cooperative research partnership between outsider and insider researchers and organisations. These principles contain and condense many of the excellent guidelines laid out by the Swiss Commission for Research Partnership with Developing Countries, produced because of a perceived need for a “clear break with previous practice.”⁹ The box gives ideas for a checklist of questions to help monitor whether these principles are applied in practice. These principles suggest that industrialised country universities and tropical schools should end their dependence on the “annexed site,” spend time and effort nurturing partnerships with developing country academic institutions, governments and local non-government organisations.

Semicolonial and partnership models of research in developing countries

Characteristic	Semicolonial model	Partnership model
Setting of research agenda	Dominated by outsiders	Negotiated with insiders
Links with national institutions and training programmes	Peripheral	Integral
Management	Line management by foreigner	Line management by national or insider
Staff costs	Predominantly foreign salaries; overinflated local salaries	More balanced investment and more sustainable in the long term
Dissemination	Heavily orientated to international journals and conferences	International dissemination balanced by outputs in national or regional journals, and media to reach a wider audience
Emphasis on sustainability and generalisability of research findings	Low	More likely
Influence with local policymakers	Low	High
Effect on national institutions	Negative: attracts best and brightest away from national research institutions	Positive; builds up local academic infrastructure



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Taking the lead locally: a Zambian health worker

Over the past decade we have had experience of working in a partnership model with national organisations in Zambia and Nepal. Because our local academic partners are highly respected and influential within the medical, academic, and policymaking fraternity, the opportunities to “make things happen,” to achieve budgetary discipline through local economic knowledge, and to influence policymaking, are greater than if the expatriate academic was managing the research programme. They also have a deeper understanding of the cultural nuances of decision making and health seeking behaviour in their country.

Risks

Partnership research puts heavy demands on the participants, and high quality projects may take longer to establish than through established annexed sites. The risks in the start-up phase of any partnership may also be higher, but in the longer term the development impact of a balanced and equal research partnership is much greater, and the scope for broader, multidisciplinary research increases.

Conclusion

Funding agencies still prefer to support developing country research through independent research units or expatriate academics. They should review their investment decisions using broader evaluation criteria than simply the scientific quality of the proposal. Over the next decade, partnership models should become the norm for investment.

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Checklist to evaluate the principles of research partnership in developing countries⁹

Mutual trust and shared decision making

- Do the partners know each other well and trust each other?
- Do the partners have regular and easy communications?
- Do the partners have good access to databases and information from international organisations?
- Who proposed the research programme?
- Do all participants understand it?
- Did people who will be affected by the research participate in developing the research theme?
- Were users consulted?
- Are the likely beneficiaries of the research clearly defined?

National ownership (ensuring that research programmes are owned and managed by nationals, with foreign inputs simply technical and advisory)

- Do national partners have overall administrative responsibility and responsibility for scientific supervision? If not, why not?
- Is there transparency, with equal access of partners to scientific and budgetary documents and fund allocation decisions?
- Do the national partners have adequate training and audit systems to take full responsibility for programme implementation?
- Are there clear and fair rules about who has authority over financial decisions?
- Will the partners share equally in any findings or potential commercial value, and has an agreement been made?

Early planning for the translation of research findings into policy and practice

- Does the research give due consideration to the social, political, economic, and technical situation of the partners?
- Is traditional knowledge and custom incorporated into the research plan?
- Is there a dissemination plan? Does this include publications or reports for the people directly affected by the research and by a wider audience than the scientific community?
- What is the plan about targeting government and non-governmental policymakers, stakeholders, and opinion leaders?
- Is authorship of scientific publications balanced?
- What steps are being taken to ensure that research findings will quickly be put into practice?

Development of national research capacity

- Does the research fit into existing national or regional research policy?
- Is the collaboration being monitored and evaluated both internally and externally?
- Are national partners properly represented in evaluations?
- How will the partnership develop local research capacity in the field of interest?
- Who will receive training, where, and for how long?
- How will South-to-South collaboration be promoted?
- What will happen to staff when existing research projects finish?
- Will this research partnership reduce the migration of researchers to the developed world or into the bureaucracies of international agencies?
- How will the partner institution sustain research and continue research after the programme is finished?