Editorials

International collaboration in health research

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There has been much interest in international collaboration in health research, especially when projects involve scientists from developed and developing countries. It is most valuable to replace suppositions, assumptions and anecdotal accounts that often feature in these discussions with well-researched objective data such as that presented by Swingler et al. in this issue (pp. 511–517).

The most successful examples of international research collaboration confer clear benefits to both contracting parties, and eventually to scientific progress in general. In an ideal case, the partnership produces a smooth dovetailing of skills and expertise. The partner from the developed country contributes expertise as well as sophisticated laboratory and other special resources that are not available in the less developed institution. Their peers in the developing country provide local clinical and other contextual knowledge. Contributions in kind from the host institution in the developing country complement the financial donation from the developed country partner.

While recognizing the potential value of such collaborative projects, there is justifiable concern about attendant risks and dangers. Because of the unequal power, there is the danger that the more powerful partners from the developed country could exploit the vulnerability of the developing country scientists and institutions: perhaps by focusing research on priority interests of the sponsoring foreign institutions rather than on the urgent needs of the host country. The study by Swingler et al. indicates that a high proportion of collaborative projects researched important health problems in the region and that foreign sponsorship did not significantly divert scientists in African countries from their priority health problems, though the paper raises some concerns. The small number of projects included in Swinger et al.'s database indicates that researchers in sub-Saharan Africa are making limited use of double-blind controlled trials or that the results of their studies are not published, or both. An earlier study by the same authors showed a hopeful trend in a steady increase of such projects over the past few decades (*1*). Failure to utilize this powerful research tool means that treatment options in Africa are often selected without the benefit of objective evidence of their efficacy and safety in the local situation. Critical decisions about health interventions in this region are largely based on research findings from studies that were carried out in other parts of the world. Such extrapolations may be inappropriate in that genetic factors, nutritional status, the coexistence of other diseases and various unknown factors affect the clinical response of patients in sub-Saharan Africa. For example, comparative studies have shown that white and Indian hypertensive patients in South Africa respond better to beta-blockers than black patients do (*2*).

Swingler et al. analysed their data on the basis of diseases specifically important to Africa, globally important diseases and diseases important to developed countries. These three categories do not include consideration of local and national priorities. It is appropriate for scientists to tackle diseases that are important locally but do not necessarily show up as major burdens at the regional or global level. For example, studies of tropical ataxic neuropathy, a cause of severe disability in south-west Nigeria, linked the disease to chronic cyanide intoxication of dietary origin (*3*). The findings from these studies facilitated the control of the disease locally and also contributed basic knowledge about the metabolic and clinical features of chronic cyanide intoxication.

Clearly, estimates of global and regional burdens of disease are too crude and too remote to be used as the sole criterion for defining and ranking national research priorities. There may be a case to study diseases that currently have a low prevalence but may be at an early stage of an incipient epidemic. In this regard, research scientists in Africa should pay attention to emerging problems of chronic diseases such as type 2 diabetes and ischaemic heart disease, before these conditions constitute major burdens of disease in the region.

Without doubt, international collaboration in health research is a valuable mechanism for advancing knowledge and strengthening research capacity. It makes modern research tools available to institutions and countries that would not normally be able to provide them from their own resources. Cross-border multicentric studies have proved valuable for identifying risk factors, testing hypotheses generated in one locality at other sites, and developing and testing appropriate, cost-effective technologies. Such projects should be carefully monitored to ensure compliance with ethical standards and maintenance of a proper balance in the influence of the cooperating partners. The present study examined the impact of foreign collaboration on clinical research; it would be interesting to carry out similar studies on the patterns of epidemiological, health systems and health policy research. ■

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2. Seedat YK. Hypertension in developing nations in sub-Saharan Africa. *Journal of Human Hypertension* 2000;14:739-47.
3. Osuntokun BO, Monekosso GL, Wilson J. Relationship of a degenerative tropical neuropathy to diet: report of a field survey. *BMJ.* 1969;643:547-50.

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