Tapping the potential for health research in developing countries

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Those of us who have long been involved in research concerning health problems in developing countries can look back with a sense of satisfaction on the progress made. Advocacy efforts have put the issue on the global agenda; we need to continue to advocate for increased investment and for further strengthening of the capacity that already exists in many developing countries. At the same time, the existing potential should be thoroughly tapped.

A number of middle-income developing countries are already making significant investments in science and are contributing to the global knowledge pool. Public funding for health research in developing countries, as a whole, has been estimated by the Global Forum for Health Research to be at least US\$ 2.5 billion in 1998 (1). Although this accounts for only 3% of the estimated global funding for health research and development, it is not insignificant. The UNESCO Institute of Statistics estimates that 27% of the total researchers in the world are in developing countries (2). If some developing countries are able to make the research investment to develop armaments, they could certainly make the much smaller commitment for health research.

According to the International Federation of Pharmaceutical Manufacturers Associations (3), some developing countries are considered strong candidates for increased biopharmaceutical research and development, on the basis of an assessment of availability of scientists, quality of scientific research institutions, and technological sophistication. These include Argentina, Brazil, Chile, China, eastern European countries, India, South Africa and Thailand.

Some ways of enhancing the productivity and impact of the health research community in developing countries may necessitate large investments, and they are worth it. Other ways are feasible with only a relatively small investment. The potential of developing

country researchers will be enhanced if they are integrated into the international research community, if they forge mutually beneficial partnerships with researchers in developed countries, and if their work is better appreciated and supported by policy-makers.

Researchers in developing countries need to overcome their sense of isolation, by having two-way access to the international production of knowledge. A number of initiatives are ongoing for improving online access to medical information for low-income countries (*W4*). More needs to be done to bring the work of scientists in developing countries to the attention of the global scientific community. In a recent study, articles by health researchers in south Asia comprised only 1.2% of all annual research on health topics in the Institute for Scientific Information database in 1992–2001 (5); the authors conclude this low proportion indicates how little is shared rather than the quantity of research carried out. Similar findings were reported from the field of tropical disease research (6).

International development work has shown that encouraging trade and promoting investment are more effective than handing out aid, and are of benefit to both parties. The case for engaging developed countries in research on health problems in developing countries does not simply derive from humanitarian concerns: enlightened self-interest is equally or more compelling (W7). Knowledge can also flow from developing to developed countries (W8). The lack of resources in developing countries encourages more cost-effective approaches to health-care delivery, which can also be applicable in other settings. Even with no additional resources, research agencies in developed countries can engage researchers and institutions in developing countries (W9). This engagement should be in addition to, not instead of, partnerships between developing countries.

For researchers, research may be an objective in itself. For policy-makers it is a means to achieve an objective and an investment for which they expect a tangible return. Countries generally support health research for two related objectives: health promotion and wealth creation. An enabling objective is contribution to the pool of basic knowledge, from which leads for health or wealth can be obtained. Health research is viewed in developed countries — and now in some of the middle-income developing countries — as an engine for economic growth. Policy-makers should appreciate that even when health research does not make money, it can save money to the health service by allowing the best use of limited resources.

Health research is needed so that decisions can be based on evidence. There is a need to demystify the research process. Its key attributes are good planning, accuracy in data collection, and proper unbiased interpretation. Complex instrumentation and sophisticated techniques are not a necessity. Many managers and policy-makers may, in fact, be doing research without knowing it.

References

(References prefixed "W" appear in the web version only, available from www.who. int/bulletin)

- 1. The 10/90 report on health research 2003-2004. Geneva: Global Forum for Health Research; 2004, p. 107-26.
- 2. Paris: Institute of Statistics, UNESCO; 2004. See: http://www.uis.unesco.org
- 3. Encouraging pharmaceutical research and development in developing countries. Geneva: International Federation of Pharmaceutical Manufacturers Associations; 2003, p. 50-1.
- 5. Sadana R, D'Souza C, Hyder AA, Chowdhury MR. Importance of health research in south Asia. BMJ 2004;328:826-30.
- 6. Keiser J, Utzinger J, Tanner M, Singer BH. Representation of authors and editors from countries with different human development indexes in the leading literature on tropical medicine: survey of current evidence. BMJ 2004;328:1229-32.

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- 1. The 10/90 report on health research 2003— 2004. Geneva: Global Forum for Health Research; 2004, pp. 107-26.
- 2. Paris: Institute of Statistics, UNESCO; 2004. See: http://www.uis.unesco.org
- Encouraging pharmaceutical research and development in developing countries. Geneva: International Federation of Pharmaceutical Manufacturers Associations; 2003, pp. 50-1.
- w4. Aronson B. Improving online access to medical information for low-income countries. New England Journal of Medicine 2004;350:966-8.
- Sadana R, D'Souza C, Hyder AA, Chowdhury MR. Importance of health research in south Asia. BMJ 2004;328:826-30.
- Keiser J, Utzinger J, Tanner M, Singer BH.
 Representation of authors and editors from
 countries with different human development
 indexes in the leading literature on tropical
 medicine: survey of current evidence. *BMJ*2004;328:1229-32.
- w7. Howson CP, Fineberg HV, Bloom BR. The pursuit of global health: the relevance of engagement for developed countries. *Lancet* 1998;351:586-90.
- w8. Lam CLK. Knowledge can flow from developing to developed countries. *BMJ* 2000;312:830.
- w9. Keusch GT, Medlin CA. Tapping the power of small institutions. *Nature* 2003;422:561-2.