

Council on Health Research for Development (COHRED)

Global Forum for Health Research

Special Programme for Research
& Training in Tropical Diseases (TDR)



CHANGING MINDSETS

Research capacity strengthening in low- and middle-income countries

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Executive summary

In the spring of 2005, the Global Forum for Health Research, the Council on Health Research for Development (COHRED) and the UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR) agreed to collaborate on a project to define practical ways in which health research capacity strengthening (RCS) can be systematically operationalized to improve the performance of national health research systems, particularly in low- and middle-income countries (LMICs).

In August 2005, the first joint consultation was held at the Centre for Humanitarian Dialogue in Geneva, Switzerland. The consultation brought together 15 selected public health and development experts from all over the world, including representatives from the World Bank, INDEPTH Network, the European & Developing Countries Clinical Trials Partnership, several leading universities as well as the executive directors and senior staff from COHRED, the Global Forum and TDR.

The primary recommendation of the consultation was to commission analytical studies to further understand the subject and make health research capacity strengthening work for LMICs.

This publication is the result of those commissioned studies and the fruitful collaboration between three leading organizations, who are advocating and supporting research capacity strengthening efforts to improve the performance of national health systems.

Priority interventions for more effective RCS

For the past several decades, RCS in the health sector has primarily focused on individual training and skills development, with varying degrees of success. This chapter argues that there are a number of priority interventions possible to improve the effectiveness of RCS, at the core of which is the need for a change in the mindset of key stakeholders. The priority interventions, which are addressed in greater detail within the chapter, include:

- In addition to supporting individual RCS, focusing far more on supporting institutional RCS, which requires a change in the mindset of funders and other international organizations. Institutional capacity is critically dependent on access to core funding (i.e. secure, stable, on-going funding that covers the major operational costs of

the institution, including salaries of some key staff). It is argued that funders should consider providing endowment funding to some institutions, which can be invested and the income used to provide core funding.

- Concrete action to promote the retention of skilled and experienced researchers in LMICs. This will require a range of interventions, such as improving conditions of service, job security, career pathways, opportunities for engagement with peers, etc., many of which again require a change in the mindset of funders (e.g. to allow the use of funds for salary top-ups and conference attendance).
- Increased collaboration between institutions within individual LMICs, which requires a mindset change within ‘southern’ institutions, given that at present, there is considerable emphasis on competing for resources. Collaboration is critical to enable larger, and better funded, research projects to be successfully undertaken, which may also contribute more substantively to informing health policy within a country. Another form of increased collaboration, that between researchers and users of research findings, is also required.
- Recognizing and then exercising the power that southern institutions have to address the perceived power imbalance in north-south research collaboration. Most funders require the involvement of local counterparts for research undertaken in LMICs by northern institutions. A mindset change within LMIC institutions can empower southern partners to insist on an equal partnership, with explicit capacity strengthening components.

These interventions build on the conceptual framework for RCS provided in the introduction and illustrate concrete examples of how to mobilize capacity beyond individual researchers and scientists.

Monitoring and evaluation of RCS

This chapter seeks to enhance the understanding of the role, contribution and impact of RCS on national health research systems, particularly in LMICs. It aims to do this by examining the way in which RCS is understood and approached. A general overview of donor approaches to

RCS is followed by an analysis of materials related to and provided by six donor organizations, selected for review because they allocate significant funding to health RCS in LMICs and have considerable experience in RCS. The organizations that are examined in this chapter are:

1. The Special Programme for Research and Training in Tropical Diseases (TDR) (UNICEF, UNDP, World Bank, WHO)
2. The Department for Research Cooperation (SAREC), Sida (Sweden)
3. The Fogarty International Center (US National Institutes of Health)
4. The Wellcome Trust (United Kingdom)
5. Danish Bilharziasis Laboratory (DBL) Centre for Health Research and Development (Denmark)
6. International Development Research Centre (IDRC, Canada)

Using the information collected from these organizations, as well as a review of the literature, this chapter then discusses different ways in which RCS is (or might be) monitored and evaluated. More specific objectives that are raised and addressed include:

- establishing whether there are any tracking systems which enable the evaluation of the role, contributions and impact of RCS projects within a number of specified organizations;
- identifying, where tracking systems exist, how they work;
- identifying desirable indicators, procedures, systems which allow RCS evaluation.

RCS and the brain drain: where are we now?

The 10/90 Report on Health Research 2001–2002, which highlighted the importance of strengthening research capacity by increasing the number of highly capable investigators for health research (Global Forum for Health Research, 2002), led to the promotion and support of research and training programmes aimed at establishing a cadre of highly trained scientists and researchers in LMICs.

However, several conditions in host countries, for example, better standard of living and quality of life, higher salaries and job opportunities, access to

advanced technology, and more stable political conditions, have given rise to a ‘brain drain’ of these highly trained or skilled scientists, who decide not to work in their own countries and migrate to, or simply stay after graduation, in developed countries, working for institutions outside their homelands (Castanos, 1998; Kupfer et al., 2004).

The concern over the brain drain is significant, particularly given the complex consequences that lead to or arise from such a migration of skill and knowledge. There is, for example, justifiable concern over the lack of policy governing the recruitment of talented human capital away from LMIC research institutions. Additionally, while emigration can lead to a loss with regard to the economy and capacity building (Adams Jr, 2003; Dugger, 2005), some economists have argued that financial remittances by expatriate scientists may contribute to their home country’s economy. While working overseas, international migrants may also have greater opportunity to contribute to scientific advancements of importance to their home countries and serve as mentors for other trainees.

Given the clear evidence that the magnitude of international brain drain has increased dramatically since the 1970s, both in absolute and relative terms, with more than 2.5 million highly educated immigrants from developing countries residing in the United States alone (US Census Bureau, 2002), this chapter attempts to analyse the state of the brain drain by:

- examining the causes that lead to high numbers of skilled researchers and scientists making the decision to emigrate to developed countries;
- analyzing the success and shortcomings of strategies to combat the brain drain;
- discussing potential tactics that governments, institutions and others involved in LMIC health development can use to offset the mass migration of researchers and scientists.

It also reiterates the need not only for more strategies to combat the brain drain, but for more evaluation of the extent and contours of the problem itself.

Beyond research: RCS and the media

Research has increasingly become a multidisciplinary act, with a range of stakeholders now consulted throughout the process. Ministries, communities, nongovernmental organizations (NGOs) and even the private sector are becoming involved as more and more researchers have shed their academic parochialism to embrace and include other perspectives and needs.

Why, then, is the media so often excluded? While there is almost a universal concurrence that the media is an indispensable tool in the dissemination and publicization of research findings (see, for example, Grilli et al., 2002; Schwitzer et al., 2005; Entwistle & Watt, 1999), there is absolutely no concurrence on how the media might become a more active and dynamic player – not only in specific research projects but in overarching health research systems. As policy-makers were once conceived as simple users of research, the media is time and again relegated to the dissemination stage of research (see Nuyens, 2005; Hovland, 2005; Nolen & Volmink, 2006). In the literature and in toolkits, the media is portrayed as little more than a passive consumer of research, an audience for whom researchers must chop up beefy science into bite-sized portions.

This chapter aims to enhance the understanding of the role of the media in RCS, principally in improving the functioning and performance of national health research systems in LMICs. It explores the role of the media in relation to research and policy development in the case of clinical trials in Kenya and Uganda that showed that male circumcision was an effective preventative measure against HIV infection. Moreover, the analysis examines how the media took over once the findings were released, becoming ombudsman, counsellor, jury and even judge. Some of the issues that are addressed include:

- how the media can provide the non-scientific elements required to discuss and dissect health research in more public arenas;
- how the media provides accountability, by challenging research, synthesizing it and putting the findings in their overarching context;
- how evidence-based interventions can be moved, through public exposure, towards policy and programme activities.

This chapter also provides a series of lessons from which to base future action in energizing the research–media link.

RCS: views from the south

This chapter is intended to offer a view of RCS from those who are the intended beneficiaries of such initiatives. It contributes to the ongoing effort to provide opportunities to review RCS in relation to long-term development goals and to increase the alignment of RCS efforts with human resources planning and research system goals in LMICs.

The recent publication, *No development without research. A challenge for research capacity strengthening* (Nuyens Y, 2005), illustrates the need for such an approach insofar as, in reviewing concepts and practices of RCS, only six publications and one ‘personal communication’ out of 77 listed references are attributed to authors from developing countries. Moreover, if WHO staff members are excluded, only one article from the south remains among the given references.

Another illustration comes from two recent evaluations on ‘general’ capacity building. One, a review of donor practices commissioned by the Rockefeller Foundation (Whyte A, 2004), highlights the lack of a systematic framework for RCS even within donor agencies that insist on capacity building in their programming. The other, a World Bank Operations Evaluation Department (OED) report on capacity building in African World Bank programmes, resulted in similar conclusions: in a review of programmes worth US\$ 900 million, no systematic framework nor coherent inclusion of RCS in programming were found (World Bank, 2005). What is problematic here is not only the demonstration of a dire need to develop far more explicit planning and implementation frameworks and evaluation criteria for RCS, but also that neither of these assessments specifically refers to the need addressed in the voices and expectations of the intended beneficiaries of RCS.

This chapter, therefore, aims to bring four views – from the ‘south’ and from someone who has worked extensively in capacity strengthening efforts with LMICs – into the conversation. These voices echo certain points raised in other chapters, while adding new perspectives on others.

12 priorities for action

Within each chapter of this report, the respective authors offer observations, recommendations and conclusions with regard to their topics. This final chapter, therefore, attempts to highlight some of the more comprehensive conclusions that can be drawn from the compiled discussions as well as priorities for action. It notes the common concerns that thread through multiple RCS critiques and posits what avenues require priority investments of not only resources, but also examination and evaluation, in order to ensure the full impact of RCS as an effective and essential component of all health and development programmes.

As most contributors attest in this report, a significant paradigm shift is urgently needed in order to align RCS with other health-related changes, and to move health research itself closer towards centre stage at the national level in LMICs.

There is an urgent need to move beyond the idea of RCS as primarily related to individual researchers, through the evident institutional capacity challenges, to a more comprehensive, holistic and demand-driven model of national research systems. Such a model genuinely engages policy-makers, government officials, the media, health-care professionals, private companies and insurers, patient advocacy groups, community-based organizations, and the general public, as well as the full spectrum of other social, cultural, civil society and faith-based institutions.

Full report available online at:

http://apps.who.int/tdr/svc/publications/tdr-research-publications/changing_mindsets

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