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Editorial

The 2012 world health report 'no health without research': the endpoint needs to go beyond publication outputs

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The theme of the 2012 World Health Report is 'no health without research' and is a call to action for filling the global gaps in health research (Mckee *et al.* 2012). Bridging the difference between the 'haves' and 'have-nots' is vital if we are to live up to the call of this theme and use research to make improvements on the ground. Absolute numbers of scientific papers and papers *per capita* have been used as the principal indicators to assess global research capacity and identify gap areas (Mckee *et al.* 2012).

At the country level, we feel this only reflects one side of the coin. Although the lack of national health research strategies precludes optimal allocation of resources, an equally important reality on the ground is the inadequate translation of research outputs to policy and practice (Walley *et al.* 2007; Frenk & Chen 2011; Mckee *et al.* 2012) – the other side of the coin. Thus, although it is vital to try to boost research and publications in countries where there are shortfalls (Zachariah *et al.* 2010), there is also an imperative to move beyond the publishing milestone to translate the evidence into policy and practice.

Over the decades, billions of dollars have been invested in research, and much knowledge has been generated, but the gap between that knowledge and what we do with it the so-called 'know-do' gap – is huge (WHO 2005; Graham & Tetroe 2009). Operational research(Zachariah et al. 2009) has a key role in bridging this implementation gap and ensuring that scarce resources invested in research produce results that can go beyond pure academic goals

and can be applied for strengthening health services and benefiting communities. This is the core determinant of practically building a dynamic and effective relationship that will marry the two key aspects of the theme of the 2012 World Health Report 'research' and 'health'.

We therefore advocate that brightening the other side of the coin should include capacity building in operational research as a means to (a) help bridge existing publication gaps; (b) strengthen national-level health research and (c) translate generated evidence into policy and practice. Whitworth *et al.* (2008) highlighted the need to encourage and build research by staff within national health services and local universities particularly in Africa. They called for improving the research environment, supporting and retaining promising individuals and building national infrastructure and management capacity through indigenous funding mechanisms.

New innovative and output-based models that deliver are urgently needed. In addition to initiatives highlighted by Whitworth *et al.* (2008), capacity-building efforts in developing countries can also be complemented by programme staff in external operational agencies such as Médecins Sans Frontieres (MSF) and The Union Against Tuberculosis and Lung Disease (The TB Union). Both organisations have highlighted their views on capacity building and leadership development in operational research in two previous publications (Harries *et al.* 2011; Zachariah *et al.* 2011). *In terms of current capacity-*

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building models, we thus ask, 'What are the problems? What are the solutions? What needs to happen next?'

What are the problems? The main problems of most current research-training models include weak selection criteria for candidates; research questions that are distanced or irrelevant to field realities or priorities; lack of continuing mentorship; no emphasis on deliverable outputs; and few opportunities and/or budgets for conducting operational research (Ohkado et al. 2010). In the aftermath of many research training courses, these problems contribute to demotivation for continuing operational research within programmes and the trainees stop pursuing research altogether or seek greener pastures. Providing new opportunities and strategies to enhance retention of trained individuals thus needs to be inherent to training strategies.

What are the solutions? Ensuring strict selection criteria and promoting practical and output-based approaches are essential. Participants need to be taught the principles of operational research while simultaneously being taken through a project spanning the entire life cycle from generating a relevant operational research question to appropriate design, data collection, analysis, paper writing, publication in a peer-reviewed journal and moving to changing policy and practice. To give an example, MSF and The TB Union began running operational research training courses in 2009. So far, we have trained 34 participants (doctors, nurses, paramedical officers and monitoring and evaluation officers) from Asia, Africa, Latin America and Europe and have seen 27 of their papers published in scientific journals. We have five other courses currently being implemented with 60 participants (Harries 2012), and there is every indication that they, too, will deliver. The next step is to assess and measure, in a standardised manner, how this research influences policy and practice. Guidance on how to do this has been recently published (Zachariah et al. 2012). We have also introduced career initiatives, such as programme-based operational research fellowships, as a way of retaining and sustaining capacity (Zachariah et al. 2011). The core message from our model is that one needs to build practical skills, be able to sustain and retain the people with these skills and ensure that there are deliverable and measurable outputs.

What needs to happen next? International and national interest needs to be built. This can only be done by generating awareness of the important role that operational research can have for health workers, programme managers and policy makers. There is a need to improve complementary linkages between academia and implementers, including nongovernmental organisations, and to foster partnership models that boost national capacity (Zumla et al. 2010). We also need ways of measuring whether research is actually delivering the expected goods,

by tracking its journey through various stages from the start line of the research protocol to the end line – the impact a given research study has on improving health of beneficiaries (Zachariah *et al.* 2012). All this is crucial if we are to build a spirit of co-ownership and responsibility for all stakeholders to the World Health theme 'no health without research'. Most important of all, there is a need for increased funding for capacity building and for assessing, on a continuing and vigilant basis, what works and what does not work, so that we can make the best of the available resources and time and address our past failures.

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