



## EDITORIAL

## Operational research in non-governmental organisations: necessity or luxury?

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We are in a hospital out-patient clinic in a sub-Saharan African country, where doctors are busy treating malaria cases. A prescription for chloroquine is given to a patient who complains that he has already taken the drug several times and it does not work. He asks for an alternative, but the doctor says that chloroquine is what is recommended and that it is the only medicine available.

When research was initially proposed to assess the situation, there was strong resistance by the implementers: 'We are too busy and have no time for research.' Several months later, operational research (OR) conducted by a non-governmental organisation (NGO) proved that the patient was correct—chloroquine treatment had a 91% failure rate, and the drug was not effective for treating *Plasmodium falciparum* malaria.<sup>1,2</sup> The lesson learnt was that the clinicians were busy with consultations, but actually giving useless medicine. In that context, OR helped us to be accountable to ourselves, our patients and our donors.

This example does not lay blame on the clinicians in this setting, who often do the best they can with very limited resources. It illustrates why, about a decade ago, Médecins Sans Frontières (MSF–Brussels), an international NGO, began to realise—late as this may have been—that during the implementation of programmes, a culture of inquiry is essential to show what works and what does not, and to find practical solutions.<sup>3,4</sup> Since then, some important indicators of institutional involvement in research include: allocation of dedicated human resources; a 10-fold increase in output of publications; establishment of an MSF ethics review board;<sup>5</sup> an innovation fund; and an on-line repository allowing open access to all publications written by MSF staff.<sup>3</sup>

We ask, what is the definition of OR in an NGO, why is it essential, and what are some of the key elements in building it?

From an NGO perspective, a pragmatic definition is 'the search for knowledge on interventions, strategies and tools that can enhance the quality or performance of programs'.<sup>3</sup> Broadly speaking, OR is thus the 'science of doing better'.

Why is it relevant for implementing NGOs? The key reasons include 1) improving programme performance, 2) assessing the feasibility of new strategies and/or interventions, and 3) to advocate for policy change. Additional positive spin-offs include improved medical

visibility and credibility, better knowledge of the scientific literature among field staff, facilitation of networking and partnerships and improvements in data collection, monitoring and feedback.

What are the key elements to building OR within an NGO? Our experience has been described elsewhere;<sup>2,3</sup> these include: establishing a 'critical mass' of dedicated human resources; developing an OR policy guideline (a road-map); defining a mechanism for generating programme-relevant research questions and integrating them into annual plans; establishing a research registry to avoid duplication of studies; and strong dissemination, including publishing in peer-reviewed journals.<sup>6</sup> These aspects need to be accompanied by capacity building approaches that are practical and output based.<sup>7</sup>

Despite a plethora of over 37 000 NGOs globally involved with activities at various levels of society,<sup>4</sup> the complimentary role OR can play in making their actions more effective is poorly understood and utilised. Implementing NGOs have a vital role to play in changing society for the better. Integrating OR into that vision will not only help to know objectively what is happening on the ground, it will also make them more effective advocates to demand improvements and accountability from policy makers and governments. Operational research is not a luxury; it should be an integral part of all NGOs' programmes.

## References

- de Radigues X, Diallo K I, Diallo M, et al. Efficacy of chloroquine and sulfadoxine/pyrimethamine for the treatment of uncomplicated falciparum malaria in Koumantou, Mali. *Trans Soc Trop Med Hyg* 2006; 100: 1013–1018.
- Zachariah R, Harries A D, Ishikawa N, et al. Operational research in low-income countries: what, why, and how? *Lancet Infect Dis* 2009; 9: 711–717.
- Zachariah R, Ford N, Draquez B, Yun O, Reid T. Conducting operational research within a non-governmental organisation: the example of Médecins Sans Frontières. *International Health* 2010; 2: 1–8.
- Delisle H, Roberts J H, Munro M, Jones L, Gyorkos T W. The role of NGOs in global health research for development. *Health Res Policy Syst* 2005; 3: 3.
- Schopper D, Upshur R, Matthys F, et al. Research ethics review in humanitarian contexts: the experience of the independent ethics review board of Médecins Sans Frontières. *PLoS Med* 2009; 6(7): e1000115.
- Rujumba J, Byamugisha R. Publishing operational research from 'real life' programme data: a better form of accountability. *Trop Med Int Health* 2011; Sep 22 [Epub ahead of print].
- Harries A D. Operational research: getting it done and making a difference. *Public Health Action* 2012; 2(1): 1–2.

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