## **EDITORIAL**

## BUILDING BRIDGES FOR HEALTH RSEARCH: ETHIOPIA AS PATHFINDER

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The first annual national conference on Neglected Tropical Diseases (NTD) was held in Jigjiga on 22-23 August 2016 under the theme of "Building the Evidence Base for the Control and Elimination of Neglected Tropical Diseases in Ethiopia". It was organized by the NTD Research Advisory Committee (NTDRAC) of the Ministry of Health (MoH) and cohosted by Jigjiga University and the Somali Regional Health Bureau. The conference was followed by the Annual NTD Program Review Meeting on 24-26 August. Among the 360 participants were delegates from all the Regional Health Bureaus, academics, 15 Higher Education Institutes, public health experts, national and international NTD partners and health care providers. There were 45 oral presentations of research papers covering NTDs and health systems. Plenary sessions addressed the status of the NTD program, operational research priorities and the challenges of Water Sanitation and Hygiene (WASH)-NTD. Critical interventions that needed to be included in NTD efforts were identified from the consultations. One outcome was for example the consensus reached to establish a WASH-NTD Task Force involving the water, education, health and other relevant sectors at Federal and Regional levels to ensure a multi-sectoral response to NTDs (1).

The TB Research Advisory Committee (TRAC) of the MoH, established 16 years ago, held its 12<sup>th</sup> annual national conference on TB on 21-24 March 2017 in Addis Ababa hosted by Addis Ababa City Administration, St Peter Specialized TB Hospital and Addis Ababa University (2). To date, annual TB conferences have been held in Addis Ababa, Jimma, Gondar, Mekelle, Hawassa, Adama, Asella, Dire Dawa and Haramaya. TRAC was instrumental in developing a national roadmap for TB which has been revised in 2017 in light of recent developments. The roadmap listed 55 priority research questions covering epidemiology, basic science, clinical care, implementation and operational research (OR) areas. It conducted OR courses for multidisciplinary *teams* of investigators who in the course of their training learned how to pose the right research questions, developed scientific proposals, conducted the studies, analyzed their data and published their key findings in peer reviewed journals (3). Through the efforts of TRAC, the TB community has come closer and interacts more intensely across disciplines and institutions than before. The MoH uses the annual forum to consult participants on practical and organizational aspects of TB control.

Ethiopia has one of the lowest researcher-to-population ratios globally, less than 100/million – more than 10 times lower than the global average. Moreover, among these, the number of researchers in health is extremely low - two-thirds of all researchers in Ethiopia work in agriculture and only 5-7% are engaged in health research (4). Yet, the challenges of disease prevention, treatment and control are enormous. Not all solutions are learned in schools and the best lessons are actually those that come from practice. Frontline workers in the health sector need to build on experience appropriately, by subjecting their practice to scientific scrutiny and continuously strengthening the evidence base guiding their interventions. New insight comes from a well-designed scientific investigation, peer review and further test through practical application. The strength of evidence grows with each cycle if research is embedded in practice, is participatory, multidisciplinary, contextual and sustained over time. This is best managed by full time researchers who can allocate the time to pursue in depth studies and run long term experiments. Health workers engaged in disease control, on the other hand, are in a much better position than career scientists in guiding the direction of research. They can define the challenges and interaction of possible causes. They can help career researchers raise the key questions that will lead to breakthroughs; but can as well also lead collaborative research. In fact, operational challenges may be overcome better and faster if implementation research is conducted by health workers running the programs.

Research costs money. The expense can be justified if the results can translate into useful outcomes and can eventually impact positively on the health and wellbeing of a society. Close collaboration and consultation of career researchers and health workers offers a much better opportunity than academic research alone to generate the evidence base for a successful disease control program more cost-effectively. It is reasonable to project that multidisciplinary team approaches incorporating many perspectives are likely to be particularly valuable in comparison to single investigator approaches. Where priorities are set together in a roadmap, and research is coordinated, implementation is facilitated and knowledge becomes practical. Research results are not wasted, money is saved, duplication avoided, confusion reduced, depth achieved and clarity emerges on how to tackle the next challenge. This will have a strong spillover effect on the culture of research, academic training and good governance. Practice becomes evidence based. Expert opinion will give way to hard evidence.

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Ethiopia is an acclaimed pathfinder in coordinating TB research at the national level (5) and this experience is now expanding to other diseases. This is very encouraging for a resource limited country facing multiple challenges of social transformation. However, these gains are still fragile and need to be consolidated further to take root and be embedded into the system well. Annual conferences are important but these should be supplemented with visible collaboration among stakeholders between conferences, in training and research support activities, in dissemination, community engagement, implementation into practice and review of outcome. Sustainable financing mechanisms need to be worked out to maintain momentum. Above all, building bridges across the big divide of academic isolation, across turfs, sectors, disciplines, and institutions will demand the hard task of a relentless effort in changing attitudes. Nevertheless, there is reason to hope that Ethiopia will chart out its own path in this regard as well.

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