## EDITORIAL

## STRUCTURED OPERATIONAL RESEARCH AND TRAINING IN THE PUBLIC HEALTH SECTOR: THE KENYAN EXPERIENCE

Operational research is becoming an increasingly valuable tool to health programmes seeking to strengthen service, quality and improve programme outcomes, but it is hampered by lack of expertise to utilise health data. The UNICEF/UNDP/World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR) based at World Health Organization (1) leads a global partnership that supports Structured Operational Research and Training Initiative (SORT IT). The initiative includes a series of workshops and mentorship-based training that targets disease control programme personnel in low and middle income countries(1).

It offers trainings that help to improve health systems through integrated operational research and capacity-building (1, 2). National health workers identify challenges or bottlenecks in their programme and are trained to conduct research using routinely collected programme data (3). TDR offers the SORT IT course to health providers in tuberculosis, malaria, neglected tropical diseases, maternal and child health, HIV and non-communicable disease programmes(1).

The SORT IT course is an outcome-oriented model, the course is divided into three one-week workshops, carried out over nine to twelve months, with clearly-defined milestones and outputs. The first workshop focuses on development of study protocols, the second workshop aims at empowering the participant on electronic quality-assured data capture and analysis using open and free access software like EpiData software (EpiData Association, Odense, Denmark) or EpiInfo (4), and the third and last workshop focuses on manuscript writing and submission to an open access peer reviewed journal. The final and most important milestone for the SORT IT course is a publication in a peer reviewed journal. Data from these publications will be available for policy and practice use. A strong, hands-on mentorship is a key feature of all the three workshops. Two to three facilitators mentor three participants. The mentorship compliment is made up of a senior mentor and junior mentors, who learn from the senior mentor (3). This mentorship model assures a pool of mentors for future SORT IT courses. By June 2016, 438 participants had been enrolled in 39 SORT IT courses worldwide, with an 85% publication rate, out of which, two-thirds of the publications have made notable contribution to policy and practice (5, 6).

In 2015, the University of Nairobi Department of Obstetrics and Gynaecology, Kenya Ministry of Health Department of Disease Prevention and Control collaborated with TDR, to carry out an operational research training course for selected healthcare providers within the Ministry of Health Department of Disease Prevention and Control. The collaboration was aimed to strengthen operations research capacity within the ministry for better health system outcomes. The manuscripts in this supplement are a product of this collaboration, the topics covered include tuberculosis, malaria, schistosomiasis, sanitation and hygiene and mental health. The training was facilitated by the staff of the Kenya Ministry of Health, University of Nairobi and those from SORT IT implementing partners in Kenya and southern African region. Going forward, the TDR plans to support more SORT IT and evidence to policy trainings.

Overall the Kenyan inaugural SORTIT course was a success; the participants were able to achieve their final milestones using mainly routinely collected data. Going forward, issues of sustainability and scalability need to be looked into, including involvement of County Departments of Health. Further collaboration involving government, international and local Non-Governmental Organizations (NGOs) and academia is needed. National actors, including the government, need to dedicate more funds for establishment of operational research teams that are multi-disciplinary with capacity to raise funds and able to publish research outputs.

AUTHORS: P. O. Owiti, MBChB, MSc, Academic Model for Prevention and Treatment of HIV (AMPATH) The, Moi University/Moi Teaching and Referral Hospital, Eldoret, Kenya, R. J. Kosgei, MBChB, MMed, MSc, A. Beatrice Kihara, MBChB, MMed, O. Ogutu, MBChB, MMed, PGDRM, Department of Obstetrics and Gynaecology, College of Health Sciences, University of Nairobi, Kenya, W. Kizito, BSc, MSc, Médecins Sans Frontières (MSF), Brussels, Belgium, J. K. Edwards, MD, MPH, Médecins Sans Frontières (MSF), Brussels, Belgium, Johns Hopkins University, School of Public Health, Baltimore, Maryland, USA, H. Tweya, PhD, BSc, MSc, The International Union Against Tuberculosis and Lung Disease, Paris, France, The Lighthouse Trust, Lilongwe, Malawi, K. C Takarinda, BSc, MSc, The International Union Against Tuberculosis and Lung Disease, Paris, France, AIDS and TB Department, Ministry of Health and Child Care, Harare, Zimbabwe, J. K. Sitienei, MBChB, Dip. Disease Control, MPH, MBA, PhD, Division of Disease Control, Ministry of Health, Kenya, E.

M. Kamau, PhD, Special Programme for Research and Training in Tropical Diseases (TDR), World Health Organization, Geneva, Switzerland.

## FUNDING/ ACKNOWLEDGEMENT STATEMENT

This research was conducted through the Structured Operational Research and Training Initiative (SORT IT), a global partnership led by UNICEF/UNDP/ World Bank/WHO Special Programme for Research and Training in Tropical Diseases (TDR) based at the World Health Organization The model is based on a course developed jointly by the International Union Against Tuberculosis and Lung Disease (The Union) and Médecins sans Frontières (MSFOCB). The specific SORT IT Programme which resulted in this publication was led by the Department of Obstetrics and Gynaecology, University of Nairobi and the Kenya Ministry of Health Department of Disease Prevention and Control.

## REFERENCES

- 1. SORT IT operational research and training 2016 [21st April 2016]. Available from: http://www.who.int/tdr/ capacity/strengthening/sort/en/.
- Ramsay, A., Olliaro, P. and Reeder, J. C. The need for operational research and capacity-building in support of the Global Technical Strategy for Malaria 2016-2030. *Malar J.* 2016;15:235.
- 3. Ramsay, A., Harries, A. D., Zachariah, R. *et al.* The Structured Operational Research and Training Initiative for public health Programmes. *Public Health Action*. 2014;4:79-84.
- 4. EpiData Software 2001 [Available from: <u>http://www.epidata.dk/</u>.
- Zachariah, R., Guillerm, N., Berger, S. *et al*. Research to policy and practice change: is capacity building in operational research delivering the goods? *Trop. Med. Int. Health.* 2014;19:1068-75.
- 6. Kumar, A. M., Shewade, H. D., Tripathy, J.P. *et al.* Does research through Structured Operational Research and Training (SORTIT) courses impact policy and practice? *Public Health Action*. 2016;6:44-49.