TDR Strategic Solutions

Strengthening research capacity for implementation to achieve universal health coverage

We build capacity for research that makes a difference, so no one is left behind.

TDR is co-sponsored by the following organizations:

UNICEF · UNDP · World Bank · WHO
Postgraduate training scheme

Building the capacity of the next generation of health researchers

The postgraduate training scheme provides a full academic scholarship in collaboration with seven universities in low- and middle-income countries. Students are trained to obtain Masters degrees focused on implementation research (IR) in malaria, TB, and neglected tropical diseases.

**SPOTLIGHT**

**Dr Muhammad Homayoon Manochehr**

Translating evidence to policy in Afghanistan to improve health care access in remote areas

**Host training institution:**
- American University of Beirut, Master of Public Health programme

**Highlights during MPH programme:**
- Research project on TB control among migrant workers and Syrian refugees in Lebanon (publication forthcoming)

**Post-training highlights:**
- Now Senior Advisor for General Directorate of Policy and Planning at Afghanistan Ministry of Public Health
- Developed policy brief that led to expansion of health services of Family Health Houses (clinics in remote, underserved areas) to include HIV/TB/malaria care with support from The Global Fund.

Since 2015, 178 master's students have been trained through the scheme.

1. American University of Beirut (Lebanon)
2. Universitas Gadjah Mada (Indonesia)
3. BRAC University (Bangladesh)
4. Universidad de Antioquia (Colombia)
5. University of Ghana (Ghana)
6. University of the Witwatersrand (South Africa)
7. University of Zambia (Zambia)

**Results**

The American University of Beirut was particularly appealing for me, as public health is taught in a context similar to that of Afghanistan, where conflict and forced migration are pervasive.

– Dr Muhammad Homayoon Manochehr

Seven TDR-supported Masters degree students with WHO Director-General Dr Tedros Adhanom Ghebreyesus, who told the students he was fortunate to receive TDR support early in his career, too.
Regional Training Centres

Fostering learning and collaboration within and across regions

TDR supports a network of Regional Training Centres in each of the six WHO regions to conduct and disseminate a wide range of training courses on good health research practices and implementation research (IR). Train-the-trainer workshops empower the RTCs to serve as training hubs that address region-specific needs and foster learning and collaboration within and across regions.

8 Centro Internacional de Entrenamiento e Investigaciones Médicas (Colombia)
9 University of Ghana (Ghana)
10 Astana Medical University (Kazakhstan)
11 Institut Pasteur of Tunis (Tunisia)
12 Universitas Gadjah Mada (Indonesia)
13 Research Institute for Tropical Medicine (Philippines)

TDR has also collaborated with RTCs to develop and offer a continuum of short training courses in implementation research:
- Massive Open Online Course (MOOC) on IR
- Basic principles in IR
- Ethics in IR
- IR Toolkit
- Guidance for reporting IR

Results

- In 2018, 982 scientists (66% women) have been trained in good health research practices and 1,156 (57% women) in implementation research.
- Short training courses in good health research practices have been institutionalized in 20 countries in five regions:
  - Bolivia, Ecuador, Guatemala, Honduras, Jamaica, Peru (AMR)
  - India, Myanmar, Nepal (SEAR)
  - Armenia, Azerbaijan, Belarus, Georgia, Kazan state of Russia, Kyrgyzstan, Tajikistan, Ukraine, Uzbekistan (EUR)
  - Mozambique (AFR)
  - Lebanon (EMR)

Research for implementation

- Is conducted within real-life health systems and community settings, removed from controlled settings associated with other types of scientific research.
- Provides evidence to support scale-up of interventions and policy changes
Structured Operational Research and Training IniTiative

Building sustainable operational research capacity to improve public health

SORT IT is a global partnership that builds operational research capacity to generate and use evidence to improve performance of disease control programmes. Participants undergo training to conduct operational research on topics such as multidrug-resistant tuberculosis, malaria, HIV/AIDS, neglected tropical diseases, maternal and child health, outbreaks and emergencies, antimicrobial resistance and noncommunicable diseases.

The SORT IT Objectives

SORT IT supports countries and institutions to:

- Conduct and publish operational research
- Enhance mechanisms for knowledge sharing
- Build sustainable operational research capacity
- Build structures and processes for evidence-informed decision-making

Impact case study:

INFLUENCE OF THE 2014-2015 EBOLA OUTBREAK ON THE VACCINATION OF CHILDREN IN RURAL GUINEA


Study Finding:
Vaccine administration declined significantly during the outbreak, and the decline persisted into the post-Ebola period. (Figure below.)

Impact:
- Ministry of Health conducted mass community awareness and education campaigns on vaccination.
- A safety net of vaccine stocks was introduced as a stop-gap measure for future outbreaks.

Figure: Trends in vaccine administration for children before, during and after the 2014-2015 Ebola outbreak, Macenta district, Guinea.

Results

- 800 participants from 90 countries over 8 years
- 65% of peer-reviewed papers published by SORT IT participants have shown an impact on policy and practice
Massive Open Online Course (MOOC) on Implementation Research

This course is a step-by-step online training for public health researchers and decision-makers, disease control programme managers, academics and others that focuses on how to design and demonstrate robust IR projects to improve control of infectious diseases of poverty and generate better health outcomes.

Implementation Research Toolkit

This toolkit provides deeper learning on implementation research. It is designed to help researchers identify system bottlenecks and the stakeholders to be involved in the process, formulate appropriate research questions, conduct the research and develop a plan for implementing the study results.

Ethics in Implementation Research

TDR and WHO’s Global Health Ethics team have jointly developed a training course for researchers and research ethics committees on the important ethical considerations in implementation research. The course comprises six interactive modules interspersed with activities including case studies, role-playing and quizzes.

Access and Delivery Partnership

The Access and Delivery Partnership (ADP) helps countries strengthen policies, human capacities, systems and regulations to ensure that effective medicines, vaccines and diagnostics reach the people who need them.

ADP is a collaboration between UNDP, WHO, TDR, and PATH and is funded by the Government of Japan. Within the partnership, TDR is working with ADP focus countries to strengthen institutional capacity in the areas of priority setting, implementation research, and drug safety monitoring.

For more information on all of our capacity building activities and resources, please visit: https://www.who.int/tdr/capacity/strengthening/en/
Clinical Research and Development Fellowship

Complementing our training programmes on research for implementation, TDR also supports the Clinical Research and Development Fellowship (CRDF), which allows early- to mid-career researchers in low- and middle-income countries to learn how to conduct clinical trials. Participants are placed for 12 months in pharmaceutical companies, product development partnerships, or research organizations and receive a reintegration grant at their home institution. The fellowship is jointly implemented by TDR and the European & Developing Countries Clinical Trials Partnership (EDCTP).

Results

As of December 2018, the cumulative number of fellows placed in 21 partners organizations was 91 (21 women, 70 men) from 33 low- and middle-income countries.

Dr Atinuke Olaleye

Bringing the CRDF experience home to Nigeria

Mentoring organization:
• GlaxoSmithKline (studied RTS,S malaria vaccine at GSK’s vaccines research centre in Belgium)

Post-fellowship highlights:
• Appointed Director of Centre for Advanced Medical Research and Biotechnology (CAMRAB) at Babcock University in Nigeria
• Currently principal investigator for a project on parasite resistance to malaria chemoprevention in pregnancy
• Organized clinical research capacity building workshop at Babcock University

The experience gained through the TDR Fellowship has been of immense help in managing my own team now.”
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Updated on 11 June 2019.

TDR, the Special Programme for Research and Training in Tropical Diseases, is able to conduct its work thanks to the commitment and support from a variety of funders. These include our long-term core contributors from national governments and international institutions, as well as designated funding for specific projects within our current priorities. For the full list of TDR donors, please visit our website at: https://www.who.int/tdr/about/funding/en/