TDR: BUILDING LOCAL RESEARCH SOLUTIONS TO CONTROL MALARIA

John Reeder, Director, TDR

The Special Programme for Research and Training in Tropical Diseases

MIM SOCIETY
Multilateral Initiative on Malaria
8th Pan-African Malaria Conference

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What is TDR?

A global programme of scientific collaboration that helps facilitate, support and influence research efforts to combat infectious diseases of poverty.

Established in 1974 and based at the World Health Organization.

TDR is co-sponsored by:

unicef for every child

UNDP Empowered lives. Resilient nations.

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World Health Organization

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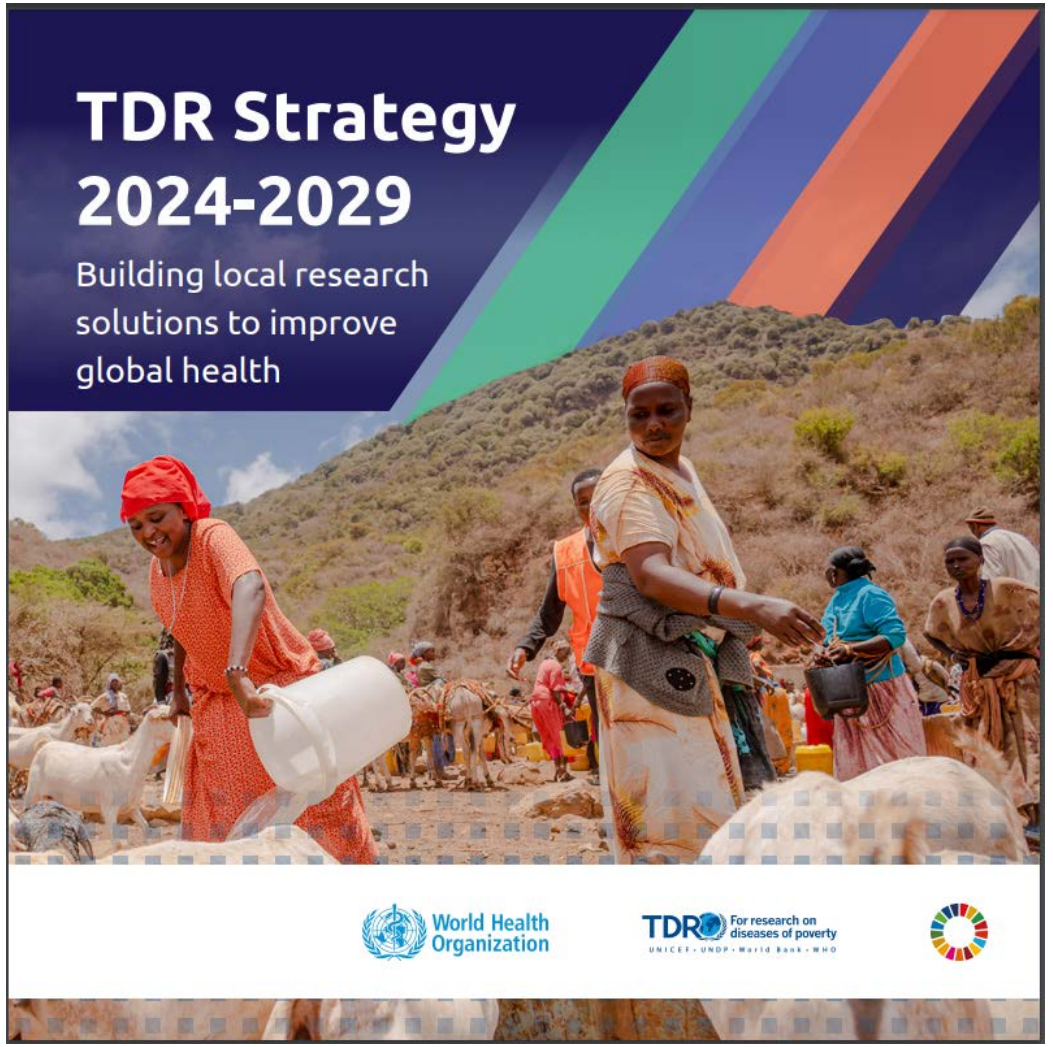
TDR Strategy 2024-2029

New strategy outlines TDR's support for country-led implementation research to improve the health and well-being of people burdened by infectious diseases of poverty.



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Strategic approaches to addressing global health challenges

Research support

Supporting and facilitating country-led implementation research to improve access to quality health interventions.

Research training

Strengthening the capacity of people, institutions and societies to produce research evidence that is useful for reducing the burden of infectious diseases of poverty.

Global engagement

Engagement and collaboration with the wider global health effort to promote and facilitate the role of research for development.

Making an impact: Supporting country-led research for global health challenges

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History of TDR

MEDICINES, DIAGNOSTICS AND VECTOR CONTROL

1975

- Multi-drug therapy for leprosy
- Mefloquin, Mefloquine plus sulphadoxine-pyrimethamine, bednets for malaria
- Ivermectin for onchocerciasis
- Leishmaniasis direct agglutination diagnostic test
- Insecticide-impregnated tsetse fly traps for sleeping sickness

COMMUNITY AND SOCIAL RESEARCH

1995

- Community-led approach to onchocerciasis annual mass treatment
- Home management of malaria by community healthcare workers
- New social research methodologies

ACCESS FOR THE MOST VULNERABLE

2005

- Building research capacity for implementation to achieve UHC
- Harnessing innovative research to control and eliminate infectious diseases of poverty
- Building resilience to vector-borne diseases and climate change
- Accelerating UHC through innovative and inclusive approaches

IMPLEMENTATION SCIENCE

2019

- Finding solutions to implementation problems
- Democratizing science, as a tool for all implementers
- Embedding research in intervention programmes
- Innovating for better application of old as well as new tools

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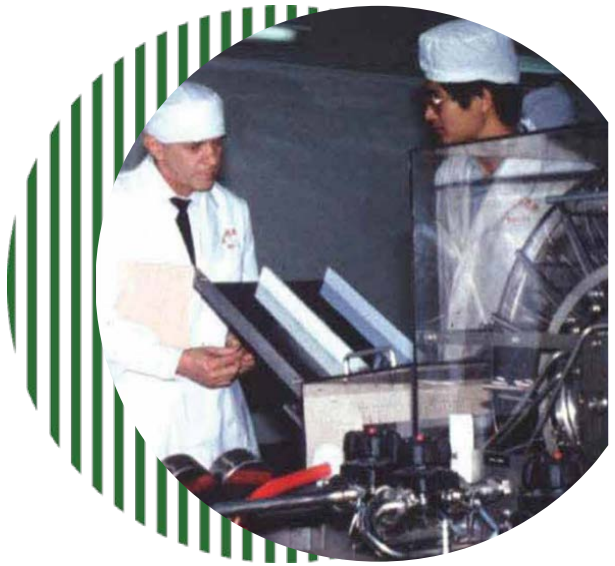
TDR and malaria research

1985

Mefloquine: TDR funded 12 clinical trials in Latin America, Zambia and Thailand to find a more cost-effective way to synthesize the drug



1991

Initiative launched to **genetically engineer** Anopheles gambiae

1996

Unit-dose packaging of **artemether** and lumefantrine improves adherence and suitability for malaria treatment

1999-2001

Multi-country trials on **artemisinin-based** combination therapies

2004

Effectiveness of **insecticide-treated bednets** established

2012

Effectiveness of **rectal artesunate** established; treatment transitioned to MMV for manufacturing

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Establishing the effectiveness of insecticide-treated nets

- In the 1990s, TDR funded large-scale trials necessary to prove the effectiveness of insecticide-treated nets in sites across Ghana, Burkina Faso, Kenya and The Gambia that covered 400 000 children.
- The final results that insecticide-treated nets could reduce overall childhood mortality by an average of around 20% led to the WHO recommendation that they be a standard preventive treatment in malaria endemic areas, and their extensive distribution across the African continent.

Testing artemisinin-based combination therapies

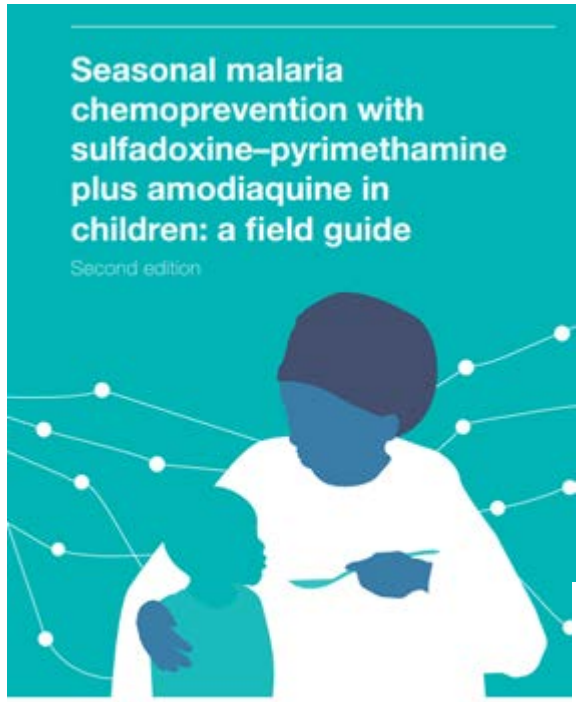
TDR coordinated a series of multi-country trials in Africa and Latin America between 1999 and 2001 comparing single-agent treatments to regimens where they were combined with artemisinin. These studies helped provide the evidence for a paradigm shift in malaria, from single-agent to artemisinin-combination therapy (ACT).

TDR was invited to the 2015 Nobel Prize ceremony where Tu Youyou was recognized for her discovery of artemisinin.

Current activities for malaria control: Seasonal malaria chemoprevention

- Support to the National Malaria Programmes of 13 countries for conducting IR/OR projects for **optimizing SMC**

- Co-organization with WHO **Global Malaria Programme** of expert meeting with NMPs implementing SMC for the **revision of the SMC field guide** (published in English and in French)



OPT-SMC
Optimizing Seasonal Malaria Chemoprevention in West and Central Africa

World Health Organization

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EDCTP

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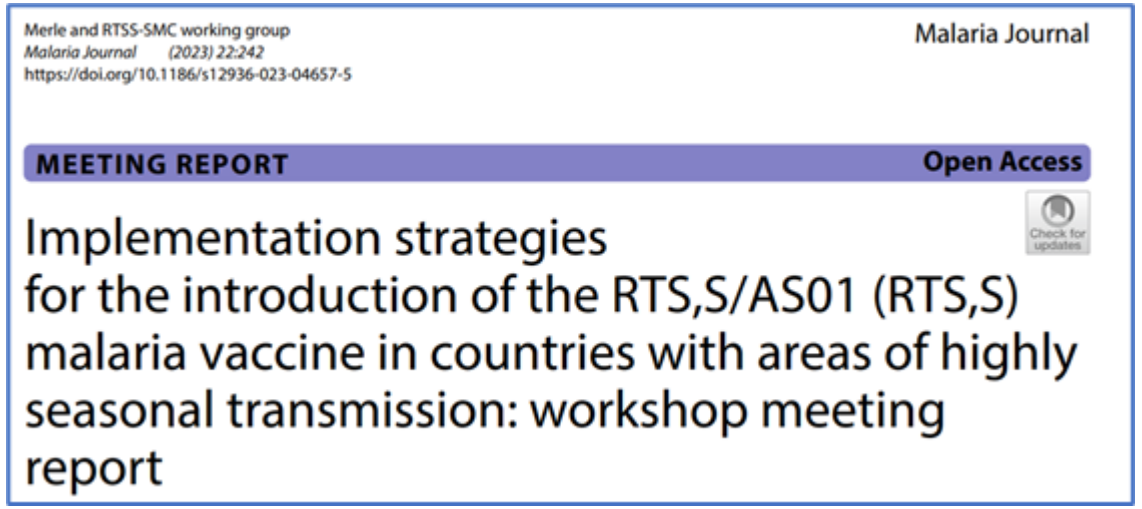
Supporting delivery of new malaria vaccines

- Developing implementation strategies for delivering new malaria vaccines (RTS,S/AS01 and R21/Matrix-M)
- Collaboration with MVIP, GAVI, PATH for the organization of a face-to-face meeting with the NMPs and EPI department of the 13 OPT-SMC countries
- Discussion of implementation strategies and mode of delivery in countries with seasonal malaria and middle to low EPI coverage
- National dialogue on malaria introduction in Guinea and support for GAVI application



THE ACCESS AND DELIVERY PARTNERSHIP

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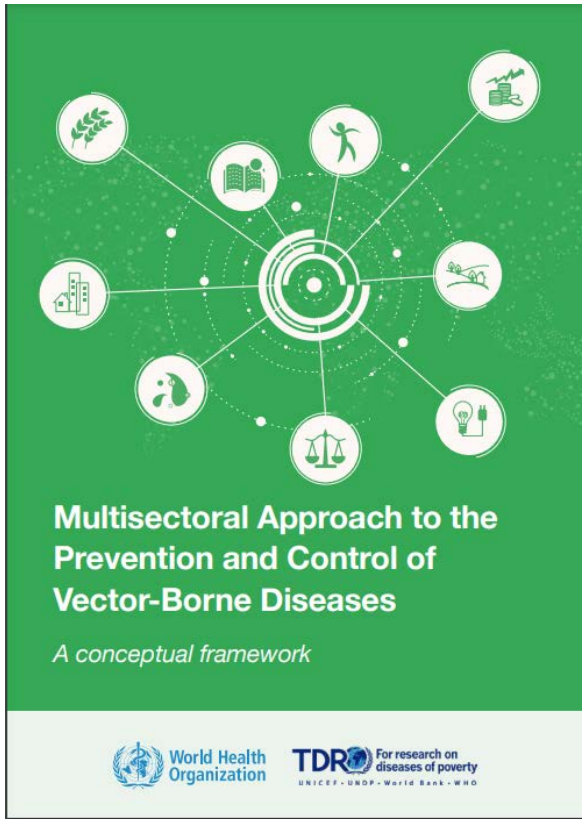
Supporting new approaches to malaria control

- Supporting a multisectoral approach for malaria vector control and mitigation of insecticide resistance

- Malakit: a malaria self-diagnosis and self-treatment kit for hard-to-reach mobile populations in Suriname, Brazil and French Guiana



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