

Introduction

This report has been drafted in response to a seemingly very simple question: "What do we know about malaria in Africa today?" In the past, the answer to this question would have been, "It depends on whom you ask."

Although most experts would have agreed on the fundamental facts, including the relative importance of the disease, its geographical distribution, and the key strategies for prevention and treatment, opinions would have begun to diverge at the next level of detail – dictated by personal experience in the absence of routinely collected and authoritative information on the global malaria situation.

Accurate statistics on malaria in Africa have been difficult to collect and report because of the enormity of the disease problem, the weakness of health information systems, and the fact that treatment of most malaria cases, as well as many deaths from the disease, occurs outside the formal health system. Following the period of international indifference to malaria, there was also little international agreement on what information was needed for monitoring malaria control and how it should be collected. This situation is changing, and there is now a strong consensus on priority indicators and the best way of collecting representative information.

During the 1950s and 1960s, the malaria eradication campaign successfully eliminated or controlled the disease in countries with temperate climates and in some countries where malaria transmission was low or moderate. However, the emergence of drug and insecticide resistance, coupled with concerns about the feasibility and sustainability of tackling malaria in areas with weak infrastructure and high transmission, brought an end to the eradication era, as well as to the bulk of international funding for malaria control and investment in malaria research. Despite international indifference in subsequent years, progress continued to be made in understanding the problem of malaria and strategies for its control. By the early 1990s the international community began to appreciate that the malaria burden was unacceptably high and worsening,

particularly in Africa, and that real reductions in malaria mortality and morbidity were possible with existing but under-used tools and strategies.

In 1992, malaria control was re-established as a global health priority by a Conference of Ministers of Health held in Amsterdam. Scientific interest in the disease and its control, political commitment to reducing the burden of malaria, and the financial resources for malaria research and control began to increase rapidly. The project for Accelerated Implementation of Malaria Control (1997–1998) represented an unprecedented contribution to the fight against malaria in Africa south of the Sahara, in terms of both technical support and funds. The funding provided for the project over the two years was estimated to have been more than 12 times the contributions made by WHO during the previous decade.

By the year 2000 a sequence of critical milestones had been achieved and an ambitious global commitment had been realized:

- 1991–1998: malaria control expertise and capacity were expanded and strengthened, particularly in Africa, especially through the project for Accelerated Implementation of Malaria Control (1997–1998);
- 1997: new research collaborations, notably the Multilateral Initiative on Malaria (<http://mim.nih.gov/>), were formed.
- 1998: the Roll Back Malaria Partnership (www.rbm.who.int/) was launched and consensus on the core technical strategies for tackling malaria established.
- 2000: the United Nations declared 2001–2010 the Decade to Roll Back Malaria in developing countries, particularly in Africa (United Nations General Assembly, Resolution 55/284).
- 2000: malaria figured prominently in the United Nations' Millennium Development Goals (General Assembly official records: 27th Special Session: Supplement 3. Document A/S-27/19/Rev.1).

- 2000: African heads of state met in a historic summit in Abuja, Nigeria, to express their personal commitment to tackling malaria and to establish targets for implementing the technical strategies to Roll Back Malaria.
- 2001: resources for controlling malaria were significantly boosted with the establishment of the Global Fund to Fight AIDS, Tuberculosis and Malaria.

With the renewed international commitment to fighting malaria, the need for regular and reliable information on the global malaria situation is greater than it has ever been. The general indifference of the past has given way to an urgent demand for information that can be used to define and analyse the malaria situation and measure progress towards the goals established by the international community and by national control programmes. The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) are committed to meeting this demand.

This report is an initial effort to collect, analyse, and present information on the malaria situation. The report focuses on Africa

and specifically on those African countries with the highest burden of the disease. These countries bear more than 90% of the global malaria burden. Emphasis is also given to the technical strategies for malaria control established by the Roll Back Malaria Partnership and the targets set at the Abuja Summit. In addition, with due regard to the importance of understanding the resource requirements of malaria control, a chapter on resource mobilization and financing is included.

The data contained in this report have been drawn from a variety of sources in order to provide the most complete picture of the malaria situation in Africa. The UNICEF Multiple Indicator Cluster Surveys and the and Health Surveys, in particular, are national surveys that represent a major advance in collection of baseline data to provide benchmarks against which progress can be measured. It is fully expected that the recent consensus on core data needs, well coordinated efforts to collect data, and progress in solving methodological and other data collection problems will together fulfil the new demands for malaria information.

The goal of Roll Back Malaria is to halve the burden of malaria by 2010. The following targets for specific intervention strategies were established at the Abuja Malaria Summit, April 2000

RBM strategy

Prompt access to effective treatment

Abuja target (by 2005)

- 60% of those suffering with malaria should have access to and be able to use correct, affordable, and appropriate treatment within 24 hours of the onset of symptoms

Insecticide-treated nets (ITNs)

- 60% of those at risk for malaria, particularly children under 5 years of age and pregnant women, will benefit from a suitable combination of personal and community protective measures, such as ITNs

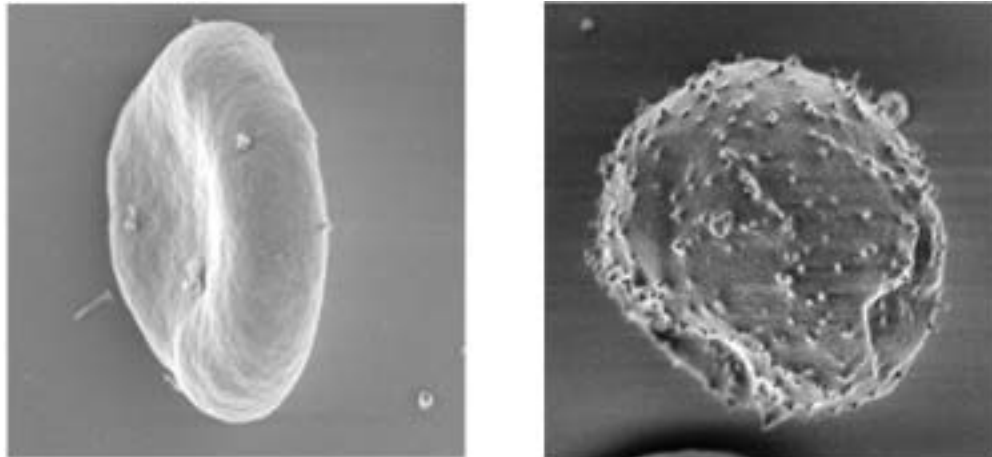
Prevention and control of malaria in pregnant women

- 60% of pregnant women at risk of malaria will be covered with suitable combinations of personal and community protective measures, such as ITNs
- 60% of pregnant women at risk of malaria will have access to intermittent preventive treatment^a

Malaria epidemic and emergency response

- 60% of epidemics are detected within 2 weeks of onset
- 60% of epidemics are responded to within 2 weeks of detection

a: The original Abuja declaration included the recommendation for chemoprophylaxis as well, but present WHO and RBM policy strongly recommends IPT – and not chemoprophylaxis – for prevention of malaria during pregnancy.



On the left is a normal, healthy, red blood cell with a smooth surface. The flexible and deformable disc shape allows it to flow easily through narrow blood capillaries.

On the right is a similar red blood cell infected for one day with *Plasmodium falciparum* parasites. It has many knob-like protrusions. The cell's rapid transformation to a more rigid spherical shape impedes flow through narrow blood capillaries. Additionally the protrusions act like Velcro, causing the infected blood cell to bind to specific receptors such as those on the lining of blood vessels. These adhesions in the brain and the placenta are part of the cause of cerebral and placental malaria.

■ Picture from scanning electron microscope: Lirong Shi, Michael Delannoy, David Sullivan, Johns Hopkins Bloomberg School of Public Health, Malaria Research Institute.