The Global Malaria Control Strategy

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Clearing land for agriculture in Brazil. Malaria is a common occurrence in remote areas, with poor housing and a lack of basic services. Photo WHO/TDR/D. Sawyer

Malaria control is everybody's business. It involves not only health work and science but education, the environment, water supply, sanitation and community development.

Malaria kills between 1.5 and 2.7 million people each year, and between 300 and 500 million others fall ill from it, often severely. Over a million of these deaths are in children aged under five but they also include women in their first or second pregnancy, older children, young adults and non-immune travellers. Tropical Africa accounts for the overwhelming majority of these cases. Malaria is most serious in the poorest countries and in populations living under the most difficult and impoverished conditions. It undermines the health and welfare of families, endangers the survival and education of children, debilitates the active population and impoverishes individuals and countries.

Armed with DDT and other insecticides and the affordable drug chloroquine, WHO led a global campaign to eradicate malaria between 1955 and 1969. In sub-Saharan Africa the effort was focused on Ethiopia, South Africa and Southern Rhodesia (now Zimbabwe), since eradication was considered not yet feasible in the other countries. The attempt was unsuccessful, though much was accomplished and the disease was eradicated from the industrialized countries in which it was endemic, and large areas of subtropical Asia and Latin America were freed or practically freed from it.

The main lesson learnt from the eradication effort was that the disease could not be controlled by a centralized campaign based on using the same approach in all situations. Today, when we have much more respect for the capacity of the mosquito and the parasite to withstand our efforts, and a better understanding of the social and economic factors involved, a new strategy is being pursued.

The Global Malaria Control Strategy was designed by health workers from the malaria-endemic countries and endorsed, first at a Ministerial Conference on Malaria Control convened by WHO in Amsterdam in 1992, and then by the United Nations General Assembly in 1994. An Action Plan to implement it, developed by WHO in collaboration with other United Nations organizations and agencies, was adopted by the Economic and Social Council of the United Nations in 1995.

Control is everybody's business

In contrast to the eradication effort, the Global Strategy recognizes that malaria problems vary enormously from country to country, from area to area and even within different groups of the population. Control efforts must be adapted accordingly if they are to succeed. The aims of the Strategy are simple – to prevent people from dying from the disease and to reduce the suffering and the social and economic damage it causes.

This is possible because malaria is a curable and preventable disease. But since many of its causes and their remedies lie outside the health sector, the Strategy calls for malaria control to become an integral part not only of general health programmes but also of the relevant development programmes in other sectors. Malaria control is everybody's business and everyone should contribute. It requires the partnership of community members and the involvement of those engaged in education and the environment in general, and in water
supply, sanitation and community development in particular.

It is not an easy task. Malaria often occurs in remote areas, with poor housing and a lack of basic health services. Crowding, migration, rapid and uncontrolled urbanization, war and civil disturbances compound the difficulties. Scarce resources have to be used to deal with emergencies. In many countries, the majority of cases of malaria are diagnosed and treated in the home or by private sector practitioners, often incompletely and with irrational regimens. This speeds up the spread of parasite resistance to antimalarial drugs, and thus poses another major problem. It has, for instance caused a dramatic rise in the cost of drugs for treating an uncomplicated case of malaria: from about US$ 0.15 to over $ 2.00 in parts of the Indochina peninsula and in the Amazon region of Brazil.

Nevertheless, progress is at last being made. By mid-1997, 47 of the 49 malaria-endemic countries in Africa had completed national plans of action for malaria control in line with the Global Strategy. In 1997 $ 10 million was provided by WHO to accelerate the implementation of these plans in 24 countries of Africa. An additional $ 10 million was contributed in 1998 to expand antimalarial activities. Outside Africa, 57 malaria-endemic countries have reoriented their control programmes according to the Global Strategy. Thus, the target set in 1995 that, globally, over 90% of countries affected by malaria should be implementing appropriate malaria control programmes has been met.

More sustainable protection

Formerly, malaria control depended heavily on insecticide spraying, but now the selective use of protection methods, including vector control, is proving to be more cost-effective and more sustainable. House-spraying is now restricted to specific high-risk and epidemic-prone areas, and increasing use is made of insecticide-impregnated mosquito nets.

In WHO’s Western Pacific Region, treated nets are a regular feature of malaria control in situations where they have been shown to be effective. In these areas, large numbers of people are protected by ecologically safe methods, and the decrease by as much as 80% in the amount of insecticide needed means a major saving of resources. Large-scale trials of insecticide-treated nets in different epidemiological settings in Africa have shown that reductions in overall child mortality of 15-33% can be achieved, but the challenge facing malaria-endemic countries of Africa is to translate these findings into sustainable programmes.

When the Strategy was adopted it was recognized that new skills would be required if the general health services were to take responsibility for diagnosis and treatment. Managers have to adapt the Strategy to local situations, existing malaria staff have to ‘unlearn’ practices that are no longer effective, and communities need to learn about malaria and how to deal with it. Training and health education are therefore major priorities. WHO has developed an international programme to train trainers. These trainers are then responsible for in-country training of district health officers and their teams, and the community. The collaboration between WHO, the World Bank and UNESCO in devising education materials and information for the media, and in the training of teachers and other education personnel, is proving invaluable.

The Global Strategy is beginning to have an impact on malaria morbidity and mortality in a great many countries. It is also allowing other countries to maintain their malaria-free status. The lesson is clear: malaria can be controlled by using the tools that are currently available. The challenge now is to make the fullest use possible of these tools in Africa where there are high levels of morbidity and mortality. Meanwhile, research and development must be continued and strengthened so as to provide new approaches as the malaria situation evolves.

THE GLOBAL MALARIA CONTROL STRATEGY

The strategy has four basic elements:

• to provide early diagnosis and prompt treatment;
• to plan and implement selective and sustainable preventive measures including vector control;
• to detect early, contain or prevent epidemics;
• to strengthen local capacities in basic and applied research to permit and promote the regular assessment of a country’s malaria situation, in particular the ecological, social and economic determinants of disease.