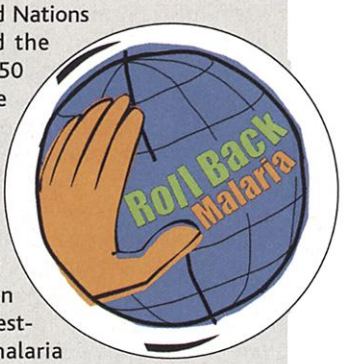
Can WHO Roll Back Malaria?

GENEVA—Ask malaria experts around the globe to rate the World Health Organization's (WHO's) performance in the fight against malaria, and you'll probably get an earful. Yet if you ask the same experts whether WHO is the right organization to lead a renewed onslaught against the disease, you are likely to get an unequivocal "yes." "We have to criticize WHO" for its past performance, says tropical medicine researcher Nicholas White of Mahidol University in Bangkok, Thailand. But if malaria is to be brought under control, he says, WHO's technical know-how and moral authority will be crucial. "We have to enthusiastically support them."

WHO Director-General Gro Harlem Brundtland needs that support. In October 1998, just 3 months after she took office, Brundtland announced Roll Back Malaria (RBM), a multiagency crusade that aims to cut malaria mortality in half over the next 10 years. Brundtland might just be the one to pull it off, say numerous public health experts. But "it will take an absolutely stupendous effort of leadership, coordination, and investment," cautions Kevin Marsh, coordinator of a collaborative research program in Kenya run by the Kenya Medical Research Institute (KEMRI), Britain's Wellcome Trust, and Oxford University. Although some researchers question whether the goal is realistic, most agree that RBM has already achieved an important political end: putting malaria higher on the agenda of political leaders, especially in Africa.

Malaria was high on the agenda once: In the 1950s and 1960s, WHO spearheaded an effort to eradicate the disease. But by several accounts, the organization began to fumble in the late 1960s, when it became clear that eradication efforts had failed in most parts of the world. "This failure seems to have knocked all the stuffing out of [WHO staff]," says Marsh. WHO drastically scaled back its technical staff in afflicted countries, largely leaving local health workers to treat the sick. "Malaria control programs collapsed," says Brian Greenwood, a malaria researcher at the London School of Hygiene and Tropical Medicine. "Since they couldn't eradicate malaria, they eradicated the [malaria researchers]." In creating RBM, Brundtland has made malaria again one of WHO's top priorities. RBM focuses on four goals: rapid treatment of children with life-threatening malaria; treatment of pregnant women infected with the malaria parasite; increased use of insecticide-impregnated bed nets; and emergency control of malaria in areas afflicted with warfare or natural disasters.

WHO will carry out these tasks in tandem with the three other "founding partners" of RBM: the United Nations Development Program, UNICEF, and the World Bank. In addition, more than 50 other organizations, ranging from the Nigerian health ministry to nongovernmental organizations such as Médecins Sans Frontières, are participating in this loose coalition. While some partners are donating personnel, others are contributing cash. The World Bank, for example, has pledged between $300 million and $500 million in interest-free loans to African countries for malaria prevention and control.



Even with the renewed energy and extra resources, cutting malaria deaths in half by 2010 will be a formidable challenge. For instance, RBM last April convened a malaria summit in Abuja, Nigeria, where nearly two dozen African heads of state pledged to take concrete steps to combat the disease. But if this "Abuja declaration" is to have any effect, it must be translated into real action on the ground, says entomologist John Vulule, acting director of the KEMRI field station in Kisian, Kenya. "This may be an uphill task given the levels of poverty in sub-Saharan Africa," Vulule adds.

Already, some experts complain that the RBM campaign has been slow to reach areas most affected by malaria. In India, says Neeru Singh, a deputy director of the Indian Council of Medical Research, "there is no RBM activity in the Madhya Pradesh district," a hard-to-reach region where serious malaria outbreaks occur each year. RBM officials counter that their job is not to micromanage what goes on in each country but to help foster political commitment and technical support. And they also deflect concerns that by participating in a broad-based coalition, WHO is diluting its own leadership role. "WHO is trying to facilitate a partnership but not control it," says David Heymann, director of the agency's division of emerging and communicable diseases. Clearly, in its renewed war on malaria, WHO will need all the allies it can muster.

—MICHAEL BALTER

of MIM, NIAID is also helping to ensure that African scientists have adequate resources. Malaria researchers "are not short on concepts," explains Fauci; "what they are short on is … materials." In 1998 the agency began building a repository of research reagents to be distributed for free. It provides antibodies, cell libraries, and DNA clones with oligonucleotide primers to "all legitimate malaria researchers," says project manager Yimin Wu. So far, 85% of its users are still American or European. But Wu plans to promote the repository to African scientists with training sessions. NIAID also plans to extend Internet connections to Africa. NIH's National Library of Medicine (NLM) has already established electronic beachheads at seven African research sites, setting up satellite dishes, receiving stations, and small local networks. "We've tried to do that in a big way in Bamako, Mali," says Fauci. "It's like having an NIH lab in the middle of the jungle." The NLM group, along with the Africa Program of the American Association for the Advancement of Science (*Science*'s publisher), is urging 11 biomedical publishers to subsidize free online access to their journals for African scientists during a 3-year trial.

Fearful vision. English cartoonist Thomas Rowlandson imagined malaria fever haunting a victim in this 19th-century scene.

Enthusiasm breeds yet more enthusiasm. Almost weekly, it seems, organizations are pledging more funds to fight malaria and other infectious diseases. But now comes the hard part: transforming that enthusiasm and basic science into treatments that can be used in rural villages. In some ways, Miller concedes, "we're worse off than we were in the 1950s," because effective pesticides like DDT are less available and the cheap antimalarial drugs have lost their potency. But with malaria now high on the political agenda and researchers armed with new tools, it may not be so crazy to think again about bringing malaria under control.

—ELIOT MARSHALL

CREDITS: (TOP TO BOTTOM) WHO; 19TH-CENTURY CARTOON BY THOMAS ROWLANDSON, COURTESY OF THE WELLCOME TRUST