

Researchers say the most confusing media stories have been about ongoing experiments aimed at clearing the virus completely in people who start treatment within weeks of infection. But such patients, who have only flulike symptoms, are notoriously difficult to spot. "In the big picture of HIV infection and disease, you're talking about a fraction of a percent of people," says Anthony Fauci, head of the National Institute of Allergy and Infectious Diseases (NIAID). Yet, such studies have won headlines worldwide because researchers have discussed the possibility of "curing" these individuals—a hypothesis that will only be tested if they stop taking their drugs.

Many leading researchers already are worried about the media cacophony that inevitably will follow if these experiments succeed. They fear the coverage will gloss over

the fact that established infections are much harder to eradicate. "If you poll people—even people in the field—they're going to be totally confused [about] whether data show eradication of virus in primary infection versus established infections," says Fauci.

Confusing the matter even further, says Luc Perrin of University Hospital in Geneva, is that it's hard to assess if a person is clear of HIV. Perrin's team now has five of 11 such patients with undetectable levels of HIV in blood and lymph-node samples. But he has little faith that they have eradicated the virus. He'd ideally like to analyze more lymph-node samples from each patient, and even then there still might be HIV in "sanctuary" sites that can't be tested, such as the brain.

Another sobering reality is that anti-HIV drugs can have serious toxicities—and more

are certain to surface. Just this week, the National Institutes of Health held a daylong meeting to discuss a study done at the National Cancer Institute that showed an increase in cancer in the offspring of pregnant mice treated with high doses of AZT. Although there's no evidence that AZT has caused cancer in humans, the study underscores how many unknowns still exist.

Next week, the media once again will wrestle with how to spin this story when a major scientific AIDS meeting is held in Washington, D.C. Jack Killen, head of NIAID's Division of AIDS, has some advice. "People seem to have a need for certainty when certainty doesn't exist," he says. "Just pretend you're reading a long Russian novel and you're in the middle of it."

—Jon Cohen

TROPICAL MEDICINE

African Malaria Studies Draw Attention

After a decade of disappointment, malaria researchers received two shots of good news last week—one from policy-makers and the other from the clinic.

On the policy front, about 100 scientists and public health experts from around the world gathered in Dakar, Senegal, to kick off what could become a new, coordinated program to attack the disease in Africa. Several government and nonprofit groups funded the meeting, but the big push came from two scientific chiefs who have developed an interest in this field: Harold Varmus, director of the U.S. National Institutes of Health (NIH), and Maxime Schwartz, director of France's Institut Pasteur. Varmus and Schwartz both attended the 3-day event and are planning to help organize later this year a smaller session that will nail down funding commitments.

Reached by phone in Dakar, Varmus said the focus of the new initiative would be on building up research capabilities in Africa. "We hope to publish a notice" inviting researchers in Africa to submit "letters of interest" to be considered for funding infrastructure support. "We want to see what the response is," and then "meet again in about 6 months, in a much smaller group," probably in Europe in July, to get down to brass tacks.

So far, Varmus acknowledged, "no one has said, 'Here's my 10 [million]; here's my five; here's my seven.' Nobody's talking specific dollars at this point." Varmus says the scientific organizers of the Dakar meeting—which was funded chiefly by the Commission of the European Communities, Britain's Medical Research Council, the World Health Organization, and Britain's Wellcome Trust, in addition to NIH and Pasteur—are writing up a report on the session.

If followed up with cash, the effort could give the malaria field a desperately needed boost. According to the World Health Organization, more than 500 million people are infected with the disease each year and more than 2 million—mostly children living in sub-Saharan Africa—die of it. Meanwhile, drug-resistant strains of the parasite are spreading to new territories, and there's been little to cheer about on the vaccine front. That's where the second shot of good news comes in, however.

Last week brought a glimmer of hope when a paper in the *New England Journal of Medicine* reported that an experimental vaccine devised by the U.S. Army and the SmithKline Beecham company worked well in a preliminary test at the Walter Reed Army Institute of Research in Washington, D.C. A synthetic concoction based on a protein that appears on the surface of the lethal malaria parasite *Plasmodium falciparum* protected six of

seven people against infection after they had been bitten repeatedly by mosquitoes carrying live parasites. Many vaccine projects have failed after a promising start, however, and this one is still in the earliest stages.

Indeed, malaria researchers say prospects for a workable vaccine are still a long way off, and the malaria problem is so urgent that new initiatives are needed now. Both Schwartz and Varmus think the same two priorities require immediate attention in Africa: Outside agencies need to help remove barriers to scientific communication and establish agreed-upon standard definitions for epidemiologi-

cal and immunological research. The clinical details vary too much from one study to the next, says Schwartz: "Everybody needs to speak the same language." African scientists cannot travel easily; journals are hard to come by; and electronic links are minimal. Building up the communications infrastructure should be one of the first goals of any effort to help scientists in Africa, according to both Varmus and Schwartz.

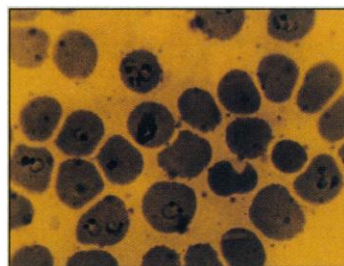
It may be difficult to sell the U.S. Congress on the idea that additional funds should be spent on a disease that has little direct impact on Americans, however. At present, NIH spends about \$20 million on all forms

of malaria research, about one-quarter of the world total. But Varmus says, "I believe that we have a responsibility" to support more concentrated efforts in Africa. "Malaria is so damn important" that it is "the obvious thing to focus on" if one wants to make an impact in Africa, he says.

Varmus says he personally likes the idea of

giving this effort a new name, something like "the alliance against malaria," and possibly a "little pot of money" to call its own. But Schwartz acknowledges that "several people are hesitant about creating a new administrative structure" to run the effort. Wellcome Trust, which has made the disease a high priority, already has an administrative group devoted to malaria. "We may achieve the same goals by getting better coordination of what exists already," says Schwartz. Varmus says it's not clear which course the project will take, but "either way is OK with me."

—Eliot Marshall



Target. Vaccine against *Plasmodium falciparum*, shown here inside blood cells, gives glimmer of hope.

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