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# EDITORIAL

## AIDS: A Global Response

The U.S. Centers for Disease Control and Prevention estimate that 40,000 U.S. citizens became infected last year with the human immunodeficiency virus (HIV), which causes acquired immunodeficiency syndrome (AIDS). Globally, over 8500 newly infected people daily join the ranks of the 21 million already living with one of the 10 known subtypes of the virus. In heavily affected countries in Africa and Asia, where one out of three urban adults may be infected, AIDS deaths among young and middle-aged adults-workers, managers, political leaders, and military personnel-are threatening health systems, economies, and national stability. With the current scale of global travel, the largely invisible, shifting, and expanding global epidemic of HIV makes the planet a more dangerous place for all.

This is not to say that there is no hope. For the first time, a number of developing countries are registering a genuine drop in new HIV infections, which shows that prevention efforts focused on safer sexual and drug-related behavior are beginning to pay off. The clearest indications come from Thailand, where the reductions in incidence and prevalence are most dramatic among young men. In cities in Uganda, one of the hardest-hit countries in the world, the number of HIV-infected pregnant women is lower now than 5 years ago. Existing prevention approaches, though imperfect, demonstrably work. But maximizing protection from HIV over future decades of foreseeable transmission calls for improved approaches and technologies. Research is key to making a serious dent in the unstable global HIV situation and bringing the numbers down to stable and safer levels.

Recent scientific breakthroughs are encouraging. For example, combination therapy with antiretroviral drugs now promises not only to defer disease progression and improve quality of life but perhaps even to turn HIV infection into a chronic nonprogressive condition. Progress in the development of HIV prevention technologies has been slower than was once hoped, but again there are encouraging advances, particularly the discovery that zidovudine can interrupt mother-to-child transmission. If these and other potential breakthroughs are to result in a safer world, the global research agenda needs to be turned on its head. Immediately. Fact 1: The AIDS problem is overwhelmingly concentrated in the developing world, where more than 90% of all HIV-infected people now live. Fact 2: AIDS intelligence and R&D are overwhelmingly concentrated in the industrialized world, where the problem, though serious, is only a small fraction of the global epidemic.

Scientists urgently need to focus epidemic intelligence on the constantly shifting global picture (as is now done for influenza virus subtypes), direct R&D to technologies that will be globally relevant and affordable, and carry out product evaluation together with the developing countries. This calls for the establishment of partnerships, including innovative joint ventures between the public sector and the pharmaceutical industry. Without them, there is little hope of developing accessible vaccines and vaginal microbicides, which are the main hopes for the future. Equally important, if not more so, partnerships must be forged between developed and developing countries. Basic laboratory research will probably continue to be conducted mainly in industrialized countries, but the developing countries have the most to gain from research. They also have a great capacity to contribute, particularly in the evaluation of new therapeutic and preventive approaches.

The new Joint United Nations Program on HIV/AIDS (UNAIDS), itself cosponsored by six UN agencies with mandates ranging from health to development, has a role to play in bringing these partners together. UNAIDS and other research sponsors and funders also bear a responsibility for ensuring that the global HIV/AIDS research agenda—in particular, any research conducted with and in developing countries—genuinely responds to developing countries' needs, not just those of the richer nations. Ignoring the AIDS research needs of 90% of the epidemic is not just unethical. It is plain irrational. The task is to make the global epidemic less dangerous; anything else offers false security for all.

A rationally prioritized AIDS research agenda would offer hope to the whole planet. It would indeed be "One world, one hope": the theme of this year's International Conference on AIDS, now about to begin in Vancouver, and of World AIDS Day 1996.

Peter Piot

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