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In cooperation we trust

Now that the dust has begun to settle from the XIII International Congress on AIDS in Durban, South Africa, one thing is clear. In spite of global research efforts, the citizens of 'developing' countries have little hope of immediate preventative measures or treatments for HIV/AIDS. The sub-Saharan region of Africa has 24.5 million infected people, but as Sarah Rowland-Jones and colleagues point out in the Commentary on AIDS in Africa in this issue, the world may be doing too little, too late.

Part of the African situation, it is noted, may be due to biological factors: different strains of the virus combined with the genetic make-up of the population may contribute to more readily transmissible and virulent strains. But a major portion of responsibility for the crisis lies with the inability of many African governments to effectively respond to the threat. A lack of resources and will has caused life expectancy to drop dramatically in some countries, wiping out any gains made in recent decades. The Commentary does cite a positive glimmer. In Uganda the upward spiral of infections among young people has been reversed through a pervasive education campaign. This illustrates that with massive government commitment and appropriate resources the 'inevitable' can be avoided.

Given this experience, and the fact that the human toll seems directly related to fumbling national responses, action now must be refocused on two broad priorities, prevention and treatment. In both of these cases it is important that home-grown infrastructures are carefully crafted and supported, through coordination of national and international efforts. An immediate goal is the prevention of new outbreaks. Local governments need to squarely acknowledge that their countries contain a segment of the more than 0.5% of the world's population facing death due to HIV/AIDS (34.5 million people were estimated to be infected at the end of 1999). The magnitude of this threat to their own country's citizens and national economy necessitates organized public education and prevention campaigns, to illuminate the small behavioral modifications that can make large differences in viral spread. As illustrated by the results in Uganda, application of this approach yields practical results.

Economies that demonstrate a commitment to this tack would be prime candidates for a portion of the $500 million that the World Bank in July announced was being made available to combat HIV/AIDS. This type of international cooperation is already underway in India, the country with the greatest number of infected citizens outside of South Africa. The Bill and Melinda Gates Foundation is funding a program to develop community-based strategies that encourage healthy behavior and provide education on HIV/AIDS and other sexually transmitted diseases. International funds are most effective when input from committed citizens determines spending priorities.

The ultimate preventative, of course, would be an affordable vaccine. Once a vaccine is available, the International AIDS Vaccine Initiative that recently got underway will support delivery and help local leaders develop the culturally appropriate public health services. For vaccine efforts to be most effective, on-the-ground surveillance networks are also needed. Pinpointing an outbreak while it is still local affords an opportunity to selectively vaccinate the surrounding population and prevent more widespread dissemination.

The second broad aim is treatment of those already infected. An executive order by US President Clinton in May of this year provided for assistance to sub-Saharan African countries in acquisition of the antiviral drugs that were priced beyond their budgets. Companies such as Boehringer Ingleheim and Bristol-Meyer Squibb are now making special efforts to increase the availability of the drugs used in developed nations and to find other pharmaceuticals that may better suit the requirements of developing countries.

To be effective in the long run, treatment requires not only drugs, but the ability to deliver them and to manage intensive patient care. Recognizing this is a recent initiative, spearheaded by Merck and the Gates Foundation in collaboration with the Republic of Botswana, that will develop infrastructure support, prevention and drug delivery systems for Botswana's specific needs. A long-term solution must also include improvement of the education infrastructure, to ensure an adequate supply of researchers, health care workers and epidemiologists.

Simmering underneath the practical problems of dealing with today's reality of AIDS in Africa is the question of the origin of HIV. This issue was creating acrimony where we desperately needed trust. Resolution of the international AIDS crisis is dependent on an atmosphere of cooperation and mutual respect between nations and cultures. In his book *The River,* Edward Hooper popularized a controversial hypothesis. It was suggested that HIV was first introduced into humans by the presence of an undetected simian virus in a batch of polio vaccine that was made by Western researchers in monkey cells and administered to Africans. But at a meeting in early September of The Royal Society in London, it was announced that independent tests of the old vaccine for contamination do not bear out that theory. This is a relief, and it is now of paramount importance for all parties to concentrate on how to contribute together to the international effort to contain AIDS. The origin of HIV is an academic point. The epidemic is not. Only in global cooperation will we find the means to