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The Doctor's World

At Meeting on AIDS, Focus Shifts to Long Haul

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Correction Appended

MEXICO CITY — Two years have passed since the 16th International [AIDS](#) Conference in Toronto, and the contrast between that meeting and the 17th, which ended here this month, was humbling.

In Toronto, the mood was almost giddy, with celebrities like [Bill Gates](#) and [Bill Clinton](#) drawing huge crowds as they championed the development of H.I.V. vaccines and microbicides.

Though the meeting this month had its circuslike elements, the mood was much more sober. No major breakthroughs were announced, and cutting-edge research findings were rare. The great strides that many researchers thought they were on the verge of making in 2006 — in vaccines, microbicides and herpes-suppressive drugs to reduce H.I.V. transmission — have failed to materialize.

The focus here was on the longer haul. There were renewed calls for strong advocacy and financing to sustain gains already made, like promoting more antiretroviral therapy in poorer countries, along with male [circumcision](#) and behavior modification.

While Mr. Gates did not attend, Mr. Clinton did. He called the conferences important in part “because they enable us to measure our progress since the last meeting, to openly acknowledge continuing problems, to evaluate the positive and negative new developments.”

With no magic bullet in sight, he said, the need now is to combine efforts to advance prevention and treatment.

The recent setbacks led many AIDS scientists to reflect on the frustrating, complicated courses of their endeavors. Still, a certain smugness could be detected among some researchers, who still expect their trials to produce favorable findings, even though such success is far from guaranteed. Initial results from trials of a daily pill that would prevent H.I.V. may be ready next year.

In explaining the recent failures of vaccine and other trials, many scientists blamed public naïveté, saying laypeople do not understand that research gains usually come in increments and that progress often follows a zigzag course.

But that view overlooks the flaws in the process itself. Many researchers write papers as if they knew what they were doing from the outset, when, in fact, serendipity plays an important role.

Failure can have different meanings for scientists and the public.

Some scientists view failure as a momentary setback on the road to success. But that can be determined only in retrospect, and only if success is achieved. The public may see failure as bad science. Not necessarily so: scientists can learn from any trial if it is well designed and well executed. But how much the recent failures can contribute to future trials is uncertain.

There were calls for innovation and recruiting more young investigators to the AIDS field. As Alan Bernstein, executive director of the Global H.I.V. Vaccine Enterprise in Manhattan, put it, “The engines of discovery are new people.”

Dr. Bernstein noted that recruiting new workers should be less of a problem than in the past because of an explosion of interest on university campuses about global health.

Since its discovery in 1981, AIDS has rivaled the worst epidemics in history. An estimated 25 million people have died, and 33 million are living with H.I.V.

An important handicap in tracking and controlling the epidemic has been an inability to get timely and accurate data about current transmission of the virus. Rough estimates have come from calculating backward, from when AIDS was diagnosed to when the virus first entered the body. That interval can vary but usually is about 8 to 10 years.

Dr. Jorge Saavedra, director of the Mexican national AIDS program, underscored the imperative for such information by saying that “if you do not follow the epidemiology of H.I.V.” and the scientific evidence, “then we will lose the fight against H.I.V.”

Now, a new test developed by the [Centers for Disease Control and Prevention](#) promises a greater ability to pinpoint hot spots of new infections and to control them more quickly, at least in developed countries. The test needs to be refined for use in poor countries, the disease centers said.

While many participants applauded development of the test, they also criticized the federal agency for an eight-month delay in reporting its success.

The best weapon against H.I.V. would be a vaccine. But despite the hubris of leading scientists who predicted quick marketing of a vaccine after the virus was discovered in the mid-1980s, none is on the horizon.

Last year, the most promising vaccine candidate failed in trials.

“Development of a vaccine is still more of an art than a science,” said Dr. Tadataka Yamada, an

official of the [Bill and Melinda Gates Foundation](#) in Seattle. He added, “No one country, any one scientist, any one team of scientists will develop the vaccine.”

A major obstacle is the inability to identify precisely what components of the immune system are responsible for combating H.I.V. For other vaccines, scientists look to the so-called correlates of [immunity](#), which include [antibodies](#) that neutralize the virus and other substances that protect against it.

Since the Toronto conference in 2006, about two million people, mostly in poor countries, have started receiving antiretroviral drugs. But the need is far greater: in the same period, five million people became infected.

“The lack of secure and reliable drug supplies is the Achilles’ heel of antiretroviral programs,” said Gregg Gonsalves of the AIDS and Rights Alliance for Southern Africa. “Central medical stores in many countries often cannot handle this task.”

Reports of the number of people being treated in poor countries are now based on estimates. Mr. Gonsalves urged regular reporting of reliable national data to the [World Health Organization](#).

A major concern is that H.I.V. will become resistant to the existing drugs, necessitating different, costlier second-line drugs. Who will pay for these drugs?

Although the United States has licensed 25 drugs in seven classes for H.I.V., doctors do not know what combination is the best for initial treatment and when to start them.

A panel of the International AIDS Society-USA issued new guidelines urging earlier treatment of H.I.V. in the developed world. Because the recommendations are based on expert opinion, many called for trials to provide them with a more scientific underpinning.

The combinations of antiretroviral drugs introduced in the late 1990s have turned AIDS from a usually fatal disease into one that can be managed as a chronic disease. But a cure is elusive.

Most participants urged further efforts to develop a cure and vaccine; unless researchers make the effort no one will ever know if they can be achieved.

Ten trials of microbicides — chemicals that are inserted into the vagina or rectum to prevent H.I.V. infection — have failed.

But researchers expressed renewed optimism that new trials will show the effectiveness of a second generation that incorporates antiretroviral drugs into a gel or a vaginal ring.

Whatever means are found to improve prevention of H.I.V., health workers should pay more attention to marketing and business methods, said Dr. [Peter Piot](#), the outgoing director of the [United Nations](#) AIDS program. Calling current public health approaches to H.I.V. prevention “amateurish,”

he said public health must be marketed as effectively as commercial products.

An underlying concern among participants was the potential for a strong reaction by critics who say that AIDS consumes too great a share of the resources available for all ailments and that efforts focused on only one disease are destroying primary health systems in poor countries.

There was enthusiastic support for the legislation passed last month allowing the United States to spend \$48 billion over the next five years to expand President Bush's program to prevent and treat AIDS in a number of foreign countries. It is believed to be the United States' most ambitious foreign public-health program. But some critics have raised questions about whether the United States is promising lifetime therapy for recipients, in effect engaging in a foreign aid entitlement program.

To this reporter, who has covered International AIDS Conferences since they began, the shift is unmistakable — from a stronger emphasis on science to more of a convention atmosphere. The change is due partly to the restricted number of scientists that the United States government sends to the meetings and to many scientists' preference for smaller, quieter meetings that are not interrupted by protesters.

No conference has been held in the United States since 1990 — as a protest against the government's policy to refuse visas to people with H.I.V. But the recent financing legislation removes that ban, possibly returning the conference to the United States in a few years.

Meanwhile, the next conference will take place in Vienna in 2010. And unexpected developments, good or bad, could well arise. As Dr. Piot said, the AIDS epidemic “has always come up with new surprises.”

This article has been revised to reflect the following correction:

Correction: August 23, 2008

The Doctor's World column on Tuesday, about the International AIDS Conference, misidentified the organization that recently issued guidelines urging earlier treatment of H.I.V. in the developed world. The guidelines were developed by a panel of the International AIDS Society-USA, not the International AIDS Society. (The groups are not affiliated.)